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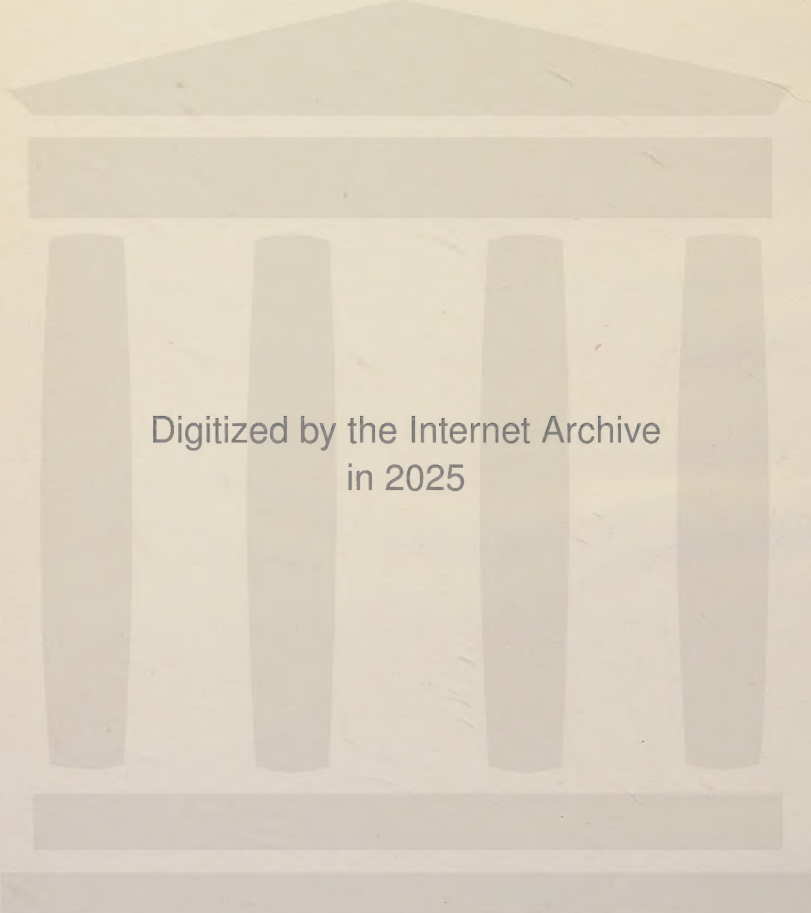
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THE B N A ARRANGED AS AN OUTLINE OF
REGIONAL AND SYSTEMATIC ANATOMY

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THE B N A ARRANGED AS AN OUTLINE
OF
REGIONAL AND SYSTEMATIC ANATOMY

*A Contribution to the Science and Teaching
of Anatomy*

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Laboratory guest of The Wistar Institute of Anatomy and Biology

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PREFACE

The Basle Anatomical Nomenclature (the B N A) has been pre-eminently successful in the simplification of anatomical terminology. From a total of 50,000 anatomical terms about 45,000 have been eliminated as unnecessary synonyms. As a consequence, anatomical terminology as represented by the B N A now consists of a list of some 5000 simple, unambiguous terms for the macroscopic structures of the human body.

This list of terms, intended for common use in the medical schools, is arranged on the basis of systematic anatomy. Doubtless such an arrangement was best adapted to the purpose of bringing about a revision of terminology. On the other hand, it appears obvious that, from the standpoint of practical anatomy, a regional arrangement of these terms in conjunction with their systematic tabulation would greatly extend the usefulness of the B N A. In dissecting laboratories and surgical clinics, the structures represented by the B N A terms are encountered in the various regions of the body not as anatomical systems, but as segments of these systems grouped together in certain definite regional relationships. In attempting to correlate systematic text and cadaver, the one proves almost as difficult to dissect as the other.

It appears important, therefore, that the present systematic B N A should be expanded to include a correlated regional arrangement of anatomical terms; an arrangement based upon the sequence in which the structures indicated by these terms may be exposed and demonstrated to the naked eye in actual dissection, thus securing a direct association of the term with the visualization of the structure to which it refers. The present work represents such an attempt and is the outgrowth of several years of laboratory experience in which a regional arrangement of B N A terms in mimeograph form has been given a thorough trial and its usefulness clearly demonstrated.

The work is presented in two parts dealing with the B N A terms as arranged, first, on the basis of regional anatomy, and, second, on the basis of systematic anatomy, with numeral indices facilitating cross-references from the one to the other. The regional arrangement is given precedence since it is in their regional relations that anatomical structures are first encountered in practical study. The work also includes a complete series of figures for the surface anatomy and the surface projection of the skeleton for the various regions of the body.

Part I constitutes a regional résumé of anatomical structures. A tabulation for any given region necessarily involves only those structures or segments of structures which are embraced within the confines of that region. Structures such as the larger nerves or vessels extending through two or more regions would be re-listed for each region in which they occur. In general the terms have been arranged with a view to greatest utility for student and clinical reference in practical work. In presenting the subject of human anatomy it is frequently difficult to steer a course between the Scylla of too great detail and the Charybdis of a paucity of subject matter, but in any event the present tabulation may serve as a basis from which deviation may be made in either direction as the requirements of the special case may dictate. In a few instances, in the interest of the student, but subject to possible criticism on pedagogical grounds, double asterisks have been affixed to terms for structures to which, in consideration of the amount of laboratory time ordinarily available for dissection, secondary emphasis may frequently be assigned. In this feature, however, as well as in the notes on dissection, a minimum encroachment upon student individuality and initiative has ever been evaluated as a dominant objective to be sought. With the exception of such osteological elements as are encountered in surface anatomy, terms relative to skeletal structures have been largely omitted in Part I. In this connection, the figures showing the surface projection of the skeleton should prove of value for purposes of general reference and orientation.

Concise statements are given for the more important or more difficult incisions and dissections involved in the demonstration of the structures as listed for each region. The order in which these regions and their component structures are dealt with is based primarily upon the sequence of dissection developed in Cunningham's *Manual of Practical Anatomy*, which may be regarded as representing a method of procedure prevalent in the majority of American and English anatomical laboratories. The sequence of primary subdivisions such as superior extremity, thorax, abdomen, etc., is obviously a more flexible matter readily adjusted to any given method of study. From the standpoint of systematic anatomy, it may not be a matter of such great importance what order may be followed in dissection so long as the structures in question are really exposed and observed. From the standpoint of regional anatomy, however, the subject presents quite a different aspect. In the latter case, the structures should be exposed in the sequence most favorable for the observation of those structural relationships which are of greatest practical significance. Toward this end, therefore, the methods of dissection in general should represent the culmination of the best available anatomical and sur-

gical experience; and this finds perhaps its best expression at the present time in the work of the British and more especially of the Edinburgh school of anatomists. Barkers' *Laboratory Manual of Human Anatomy*, 1904, which in method is in close agreement with that of the Edinburgh school, has also been a source of valuable suggestions, especially in the case of the brain and sense organs.

Part II constitutes a systematic résumé of anatomical structures and, with the exception of certain minor changes, is based upon the systematic arrangement of the B N A terms, including text figures 11 to 13 and plates 14 and 15, as originally published by His, *Archiv für Anatomie und Entwicklungsgeschichte, Supplemental Band*, 1895. This arrangement, as emphasized by Dr. F. T. Lewis (Stohr's *Text-book of Histology*, ed. 6, p. vi), is such as to furnish "an excellent means by which students may review anatomy."

In Part I some of the terms are in Latin while others are anglicized. In a few instances it has been necessary to employ a term not listed in the B N A, as, for example, in the case of the surgical triangles of the neck. Such terms can, however, always be recognized through the absence of cross-reference numerals. In Part II all the B N A terms have been retained in their original Latin form. In Part I, that form of the term has been used which appears most prevalent in the majority of the standard English and American anatomical texts and in the conversational language of the laboratory and clinic. Where this is not clear, the Latin term is given. In the event of differences in different texts regarding the terms which are anglicized, the cross-references to Part II facilitate a ready reference to the equivalent Latin form, as, for example, in the case of stomach and ventriculus, or spleen and lien. In this connection it must be recognized that as yet there is no authoritative list of English equivalents for the B N A and no unanimity of agreement as to the usage of Latin or anglicized forms—a problem toward the solution of which an authoritative decision by proper representatives from English-speaking countries would render an important contribution in the interests of medical science.*

A thorough understanding and an adequate command of anatomical terms constitute an important objective in anatomical study. The same is equally true of dexterity in dissection, independence of observation, and the verification of textbook statements. In the last analysis, however, perhaps the matter of greatest importance is the student's own efforts toward the interpretation and organization of the facts and observations thus acquired. Instructors, cadavers, textbooks, atlases, and laboratory manuals are only means to an end.

* Relative to this subject may be noted E. B. Jamieson's work on *The Basle Anatomical Nomenclature* (London, W. Green and Son, 1916).

If the student is lacking in this ability or fails to develop it, all these accessories will be of little avail. A mere memory of anatomical terms, and all the minutiae of structure, do not in themselves constitute a working knowledge. It is only as these data become organized in such a way that when confronted with the living body we can visualize the form, position, relations, and functions of its various structures as component parts of a living, working machine and at the same time have a ready command of the terms by which these structures are designated, that we can regard ourselves as having made any great degree of progress toward a mastery of human anatomy. Toward the realization of this end the present work is necessarily only one of many factors. It has been undertaken with a keen appreciation of the almost discouraging character of some of the perplexing problems it involves and with the realization that at best it must represent a beginning which only the cumulative data acquired with more extended experience and criticism can bring to perfection. Its immediate purpose will, however, be attained if it proves to be of real utility in the establishment of a basis for a more direct correlation of anatomical terminology and structure in the practical study of the cadaver and in the presentation of a résumé of regional and systematic anatomy for anatomical and clinical reference which will materially facilitate the attainment of such a working knowledge of the human mechanism.

The decision as to the final form of the first edition of the work has been materially facilitated by valuable suggestions from students and laboratory assistants. The present edition incorporates changes based upon subsequent laboratory experience and upon suggestions generously given by colleagues in different anatomical laboratories. These changes include additional notes on methods of approach in regional dissections, a conservative increase in the number of terms to which double asterisks have been affixed, and rearrangements in some of the smaller subdivisions of the subject content.

It is also a pleasure to acknowledge indebtedness to The Wistar Institute of Anatomy and Biology for the laboratory privileges for investigative work which I have enjoyed and for the hearty support which has made possible the publication of the present volume.

VICTOR E. EMMEL.

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY
Philadelphia, Pa.

June, 1927.

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PART I

REGIONAL ANATOMY

SUPERIOR EXTREMITY

PLATE 1¹

Posterior aspect of the superior extremity showing surface anatomy and surface projection of the bones of the pectoral girdle and free extremity.

¹In plates 1-9 only such structures are labeled as can be identified by inspection and palpation.

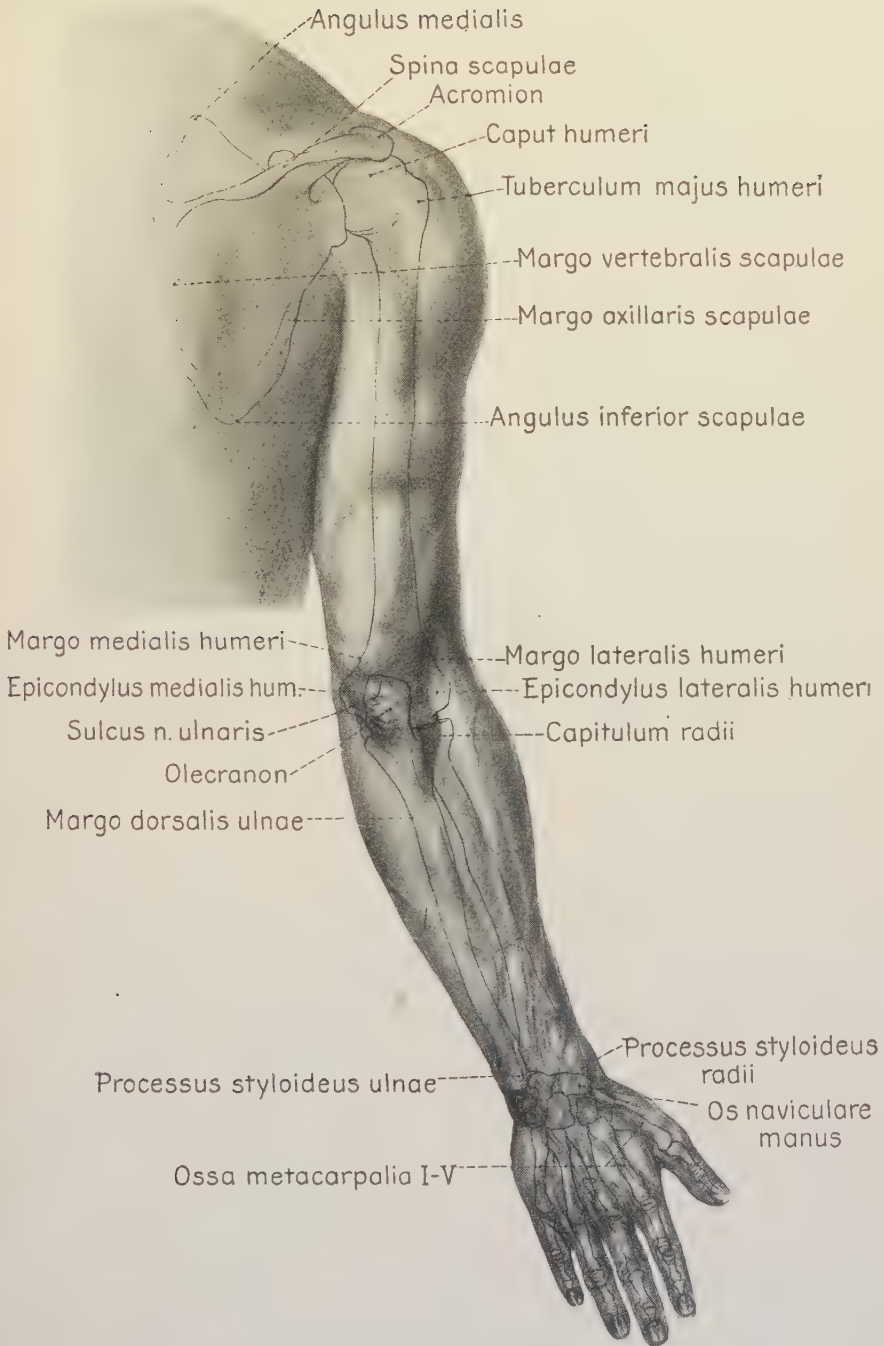
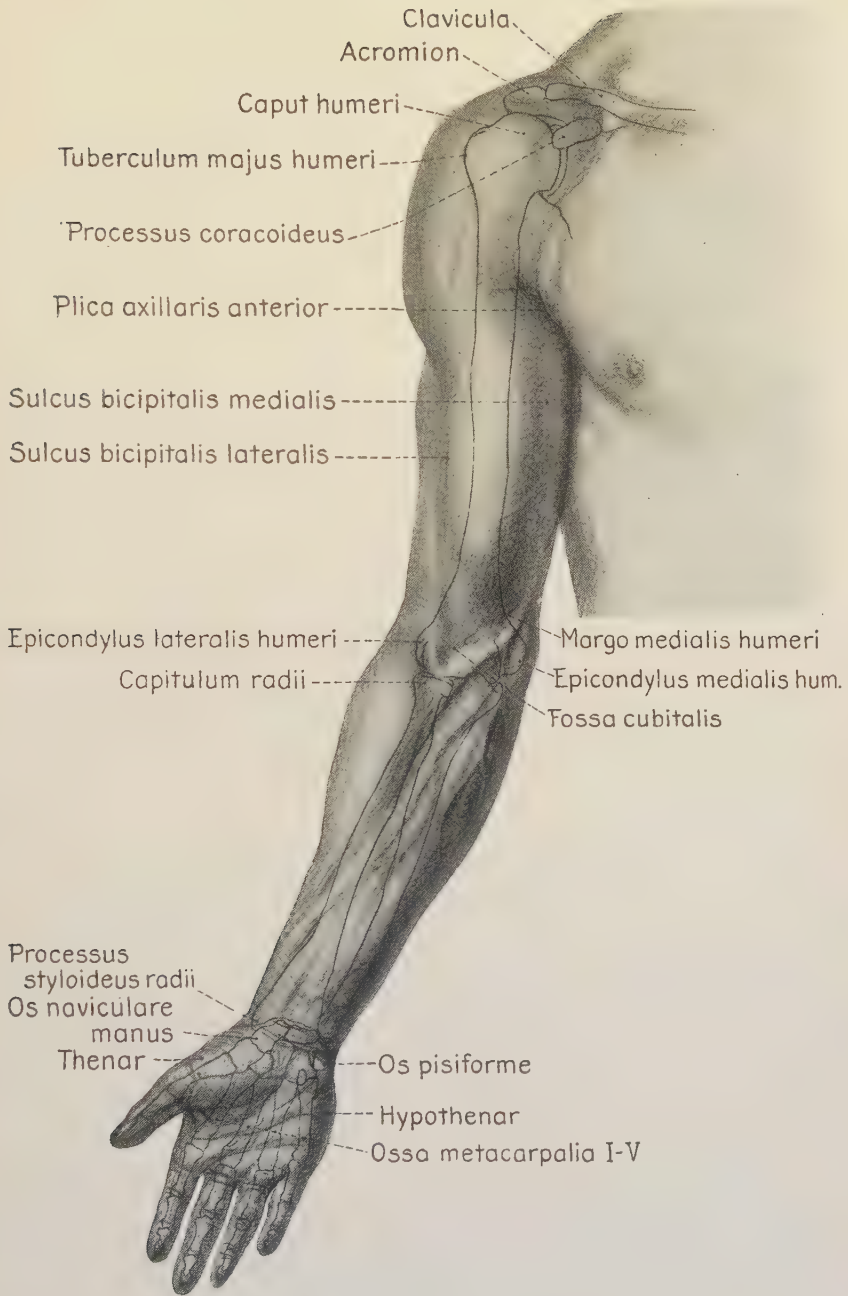


PLATE 2

Anterior aspect of the superior extremity showing surface anatomy and surface projection of the bones of the pectoral girdle and free extremity.



PART I. REGIONAL ANATOMY²

SUPERIOR EXTREMITY

I. Structures of the Back; with Reference Primarily to Structures in Relation to the Superior Extremity

1. SURFACE ANATOMY. (Pls. 1, 4.)

Structures which may be identified by inspection and palpation.

For subdivisions of the superior extremity see III: 1.

Spinous processes—6: 37.

Vertebra prominens—6: 38.

Medial angle of the scapula—13: 52.

Inferior angle of the scapula—13: 50.

Spine of the scapula—13: 42.

Acromion—13: 45.

Iliac crest—15: 18.

For the osteology of the girdle of the superior extremity, see 13: 36-65.

2. REGIONS OF THE BACK. (Pl. 12. May be outlined on the skin with pencil or crayon.)

Median region of the back—83: 24.

Interscapular region—83: 25.

Scapular region—83: 26.

Suprascapular region—83: 27.

Infrascapular region—83: 28.

Lumbar region—83: 29.

Region of the hip—83: 30.

² In conformity with the Basle Anatomical Nomenclature (B N A) all brackets relating to anatomical terms are used in the following sense:

Oval brackets () indicate variations (*varietates anatomicae*).

Angular brackets [] contain explanatory additions, among which are included double names and personal names.

One affixed asterisk* is used to indicate ontogenetic expressions (e.g., *Membranae deciduae**—43: 5, *Vena umbilicalis**—55: 34, etc.).

In Part I two affixed asterisks** are used to indicate structures to which, in consideration of the amount of laboratory time ordinarily available for dissection, secondary emphasis may frequently be assigned.

The numerals affixed to each term in the regional anatomy (Part I) cite the page (indicated by numeral at bottom of page) and number of the same term in its systematic position in the outline of systematic anatomy (Part II). In connection with these cross-references, it will be observed that the terms in Part I are anglicized in some instances and given in their Latin form in other instances, whereas in Part II the terms appear exclusively in Latin. In the latter case, the term corresponds with the original B N A; in the former case the term has been used in the form which appears to coincide with the usage common to the majority of standard American and English anatomical texts, but it is to be recognized that as yet there is no authoritative English list based on the B N A and that for the present decisions upon this point are necessarily largely dependent upon the individual preferences of author and student. (See also Preface.)

Sacral region—83:31.
 Gluteal region—83:32.
 Perineal region—83:33.

3. FASCIA, CUTANEOUS NERVES, AND VESSELS.

Skin incisions: (*a*) in the midline from the vertebra prominens to the tip of the coccyx; (*b*) from the tip of the coccyx to the posterior superior iliac spine, thence along the iliac crest to within about 25 cm. of the anterior superior iliac spine; (*c*) from the vertebra prominens to the medial margin of the acromion; (*d*) from the spinous process of the first lumbar vertebra to the lateral margin of the acromion.

Superficial fascia**—23:36.

Medial cutaneous rami of posterior rami of thoracic nerves**—
 69:77.

Lateral cutaneous rami of posterior rami of thoracic nerves**—
 69:76.

Posterior rami of lateral cutaneous rami of intercostal nerves**—
 —70:4.

Medial rami of posterior rami of lumbar, sacral and coccygeal
 nerves**—70:13, 19.

Lateral rami of posterior rami of lumbar nerves**—70:14.

Medial cutaneous rami of posterior rami of intercostal arter-
 ies**—49:63.

Dorsal rami of lumbar arteries**—50:10.

Posterior rami of lateral cutaneous rami of anterior rami of
 intercostal arteries**—49:68.

4. MUSCLES, NERVES, AND VESSELS.

a. Muscles: first layer.

Exposed by removing both superficial and deep layers of fascia.

Trapezius muscle—23:15.

Latissimus dorsi muscle—23:17. (Not including its inser-
 tion.)

Trigonum lumbale—25:48.

*b. Structures in relation to the superior margin of the scapula.***

May be demonstrated by detaching the thoracic part of the trapezius muscle at its origin, separating it from the cervical part of the muscle by a transverse incision at the level of the vertebra prominens, and reflecting the thoracic portion toward its insertion, exposing at the same time the external ramus of the accessory nerve—68:59. and the muscular rami from the third and fourth cervical nerves supplying it. Dissection should not extend beyond the scapular margin.

Inferior belly of the omohyoid muscle—24:59.

Suprascapular nerve—69:31.

Transverse scapular artery—48:60.

Superior transverse scapular ligament—19:43.

c. Muscles: second layer.

Rhomboideus major muscle—23 : 18.

Rhomboideus minor muscle—23 : 19.

Levator scapulae muscle—23 : 20. (Insertion only.)

The descending ramus of the transverse cervical artery—48 : 60 may be observed in the interval between the rhomboideus minor and the levator scapulae muscles.

d. Nerves and vessels.

The following nerves and artery may be exposed by detaching the levator scapulae muscle at its insertion and the rhomboid muscles at their origins, and reflecting the latter muscles toward their insertions.

Dorsal scapular nerve—69 : 27.

Descending ramus of the transverse cervical artery—48 : 69.

The following structures may be demonstrated by detaching the latissimus dorsi muscle at its origin and reflecting the muscle toward its insertion.

Thoracodorsal nerve—69 : 33. (Termination only.)

Thoracodorsal artery—49 : 10. (Termination only.)

II. Anterior Thoracic Region and Axillary Fossa

1. SURFACE ANATOMY. (Pls. 2, 3.)

Structures which may be identified by inspection and palpation.

Clavicle—13 : 59.

Sternal extremity—13 : 60.

Acromial extremity—13 : 63.

Sternum—7 : 46.

Manubrium—7 : 47.

Jugular notch—7 : 54.

Body of sternum—7 : 50.

Angle of sternum—7 : 48.

Xiphoid process—7 : 52.

Ribs I—XII—7 : 28.

Costal cartilages—7 : 32.

Coracoid process of the scapula—13 : 58.

Mamma—4 : 50, 80 : 5.

Papilla mammae—80 : 6.

Corpus mammae—80 : 7.

Areola mammae—80 : 14.

Accessory mammae—80 : 18.

Axilla—5 : 10.

Anterior axillary fold—5 : 11.

Posterior axillary fold—5 : 12.

Humerus—13 : 67.

2. PECTORAL REGIONS—83:2. (Pl. 11 and fig. 1. May be outlined on the skin with pencil or crayon.)

Anterior pectoral region—83:3.

Sternal region—83:4.

Clavicular region—83:5.

Infracavicular region—83:6.

Deltoideopectoral triangle—83:7.

Mammary region—83:8.

Inframammary region—83:9.

Lateral pectoral region—83:10.

Axillary region—83:11.

Axillary fossa—83:12.

Lateral costal region—83:13.

3. ANTERIOR THORACIC WALL: SUPERFICIAL STRUCTURES.

a. Superficial fascia, cutaneous nerves and blood vessels.

Skin incisions: (a) longitudinally from the jugular notch to the xiphoid process; (b) from the xiphoid process transversely around to the back; (c) from the jugular notch laterally, along the clavicle, to the tip of the acromion; (d) from the xiphoid process obliquely upward and laterally along the anterior axillary fold to the arm, encircling the areola mammae and leaving it *in situ*.

Superficial fascia**—23:36.

Platysma muscle—24:54.

Supraclavicular nerves—69:17.

Anterior supraclavicular nerves**—69:18.

Middle supraclavicular nerves**—69:19.

Posterior supraclavicular nerves**—69:20.

Anterior cutaneous rami of intercostal nerves**—70:8.

Medial mammary rami—70:9.

Anterior rami of lateral cutaneous rami of intercostal nerves IV to VI**—70:5.

Posterior rami of lateral cutaneous rami of intercostal nerves IV to VI**—70:4.

Lateral mammary rami of lateral cutaneous rami of intercostal nerves**—70:6.

Perforating rami of internal mammary artery**—48:40-43.

Lateral cutaneous rami of anterior rami of intercostal arteries IV to VI**—49:67.

Tributaries of internal mammary vein.**

b. Mamma—80:5-18.

4. ANTERIOR THORACIC WALL: DEEP FASCIA AND PECTORALIS MAJOR MUSCLES.

Pectoralis fascia—25:22.

(Sternalis muscle)—24:73.

Pectoralis major muscle—24:74-77. (Not including its insertion.)

Exposed by removing the pectoral fascia but leaving intact the axillary fascia.

5. AXILLARY FOSSA, AND STRUCTURES SUBJACENT TO THE PECTORALIS MAJOR MUSCLE.

a. Structures in relation to the base of the axillary fossa.

The dissection should not extend into the fossa.

Axillary fascia—26:40.

Intercostobrachial nerves**—70:7.

Thoracodorsal nerve—69:33.

Thoracodorsal artery—49:10.

Lateral thoracic artery—49:7.

Long thoracic nerve—69:28.

Axillary lymph glands—56:45.

b. Structures exposed by the reflection of the clavicular part of the pectoralis major muscle.

Demonstrated by detaching the clavicular part of the pectoralis major muscle at its origin and reflecting it toward its insertion.

Coracoclavicular fascia—25:23.

Thoracoacromial artery—49:2. —

Acromial ramus**—49:3.

Acromial network**—49:4.

Deltoid ramus**—49:5.

Pectoral rami**—49:6.

Thoracoacromial vein—54:27. ←

Cephalic vein—54:37.

Anterior thoracic nerves—69:29. —

c. Structures exposed by the reflection of the sternocostal part of the pectoralis major muscle.

Demonstrated by dividing the sternocostal part of the pectoralis major muscle midway between its origin and insertion and reflecting the two parts medially and laterally respectively.

Coracoclavicular fascia—25:23.

Pectoralis minor muscle—24:78.

d. Contents of the superior part of the axillary fossa.

Exposed by removing the portion of the coracoclavicular fascia extending between the clavicle and the superior margin of the pectoralis minor muscle.

Axillary artery—48:70. (Its first part.)

Axillary veins—54:29.

Brachial plexus—69:24.

Medial cord—69:39.

Lateral cord—69:38.

Posterior cord—69:40.

Lymph glands.

e. Contents of the inferior part of the axillary fossa.

Exposed by removing the fascia and adipose tissue inferior to the pectoralis minor muscle.

Axillary artery—48:70. (Its third part.)

Median nerve—69:48.

Musculocutaneous nerve—69:41.
 Medial antibrachial cutaneous nerve—69:45.
 Axillary vein—54:29.
 Medial brachial cutaneous nerve—69:44.
 Ulnar nerve—69:55.

f. Structures in relation to the medial wall of the axillary fossa.

Intercostobrachial nerves—70:7.
 Long thoracic nerve—69:28.
 Lateral thoracic artery—49:7.
 Pectoral lymph glands—56:47.

g. Structures in relation to the posterior wall of the axillary fossa.

Thoracodorsal nerve—69:33.
 Subscapular artery—49:9.
 Thoracodorsal artery—49:10.
 Circumflex scapular artery—49:11. (Origin only.)
 Subscapular nerves—69:32.
 Subscapular lymph glands—56:46.

h. Axillary vessels.

The exposure of the entire extent of these vessels may be completed by the reflection of the pectoralis minor muscle.

Axillary artery—48:70.
 Highest thoracic artery—49:1.
 Thoracoacromial artery—49:2.
 Lateral thoracic artery—49:7.
 External mammary rami**—49:8.
 Subscapular artery—49:9.
 Thoracodorsal artery—49:10.
 Circumflex scapular artery—49:11. (Origin only.)
 Anterior circumflex humeral artery—49:12. (Origin only.)
 Posterior circumflex humeral artery—49:13. (Origin only.)
 Axillary vein—54:29.
 Lateral thoracic vein—54:30.
 Thoracoepigastric veins—54:32.
 Costoaxillary veins**—54:31.
 Cephalic vein—54:37.

i. Subclavius muscle—24:79.

j. Brachial plexus.

Its exposure may be completed—i.e., so far as it is related to the axillary fossa—by detaching the subclavius muscle at its insertion, removing the middle third of the clavicle, and dividing the axillary artery and vein at the level of the clavicle and reflecting them distally. For the subdivision of the rami of brachial plexus into pars supraclavicularis and pars infraclavicularis see 69:25 and 69:37.

- Lateral cord—69 : 38.
 - Anterior thoracic nerve—69 : 29.
 - Musculocutaneous nerve—69 : 41.
 - Median nerve—69 : 48. (Lateral head.)
- Medial cord—69 : 39.
 - Anterior thoracic nerve—69 : 29.
 - Median nerve—69 : 48. (Medial head.)
 - Ulnar nerve—69 : 55.
 - Medial antibrachial cutaneous nerve—69 : 45.
 - Medial brachial cutaneous nerve—69 : 44.
- Posterior cord—69 : 40.
 - Subscapular nerves—69 : 32.
 - Thoracodorsal nerve—69 : 33.
 - Axillary nerve—69 : 34.
 - Radial nerve—69 : 65.
 - Subclavian nerve**—69 : 30.
 - Long thoracic nerve—69 : 28.
- k. Serratus anterior muscle*—25 : 1.

III. Superior Extremity: General Characteristics

1. SUBDIVISIONS.

- Axilla—5 : 10. (Cf. Superior Extremity, II : 1.)
 - Anterior and posterior axillary folds—5 : 11, 12.
- Acromion—5 : 13.
- Arm—5 : 14.
 - Anterior and posterior surfaces—5 : 15, 16.
 - Lateral and medial surfaces—5 : 17, 18.
 - Lateral and medial bicipital sulci—5 : 19, 20.
- Elbow—5 : 21.
- Forearm—5 : 22.
 - Dorsal and volar surfaces—5 : 23, 24.
 - Radial and ulnar margins—5 : 25, 26.
- Hand—5 : 27.
 - Carpus or wrist—5 : 20.
 - Metacarpus—5 : 29.
 - Dorsum of hand—5 : 30.
 - Palm or volar aspect of hand—5 : 31.
 - Thenar—5 : 32.
 - Hypothenar—5 : 33.
 - Digits of hand—5 : 34.
 - Thumb or pollex—5 : 35.
 - Index—5 : 36.
 - Middle digit—5 : 37.
 - Ring digit—5 : 38.
 - Smallest digit—5 : 39.
 - Dorsal and volar surfaces—5 : 40, 41.
 - Radial and ulnar margins—5 : 42, 43.

For the osteology of the free part of the superior extremity see 13 : 66-15 : 4.

2. REGIONS OF THE SUPERIOR EXTREMITY—83: 37. (Pls. 11, 12.)

- Acromial region—83: 38.
- Deltoid region—83: 39.
- Lateral and medial regions of arm—83: 40, 41.
- Anterior and posterior regions of arm—83: 42, 43.
- Anterior region of elbow—83: 44.
- Cubital fossa—83: 45.
- Posterior region of elbow—84: 1.
- Olecranon region—84: 2.
- Lateral and medial regions of elbow—84: 3, 4.
- Volar and dorsal regions of forearm—84: 5, 6.
- Radial and ulnar margins of forearm—84: 7, 8.
- Dorsal and volar regions of hand—84: 9, 10.
- Digital regions of hand—84: 11.
- Dorsal, ungular and volar regions of digits—84: 12-14.

IV. Region of the Shoulder

1. FASCIA, CUTANEOUS NERVES, AND CEPHALIC VEIN.

- Superficial fascia**—23: 36.
- Exposed by reflecting the skin of the shoulder distally as far as the insertion of the deltoid muscle.
- Posterior supraclavicular nerves**—69: 20.
- Lateral brachial cutaneous nerves**—69: 36.
- Cephalic vein—54: 37.
- Deep fascia.
- Subscapular fascia—26: 41.
- Supraspinous fascia—26: 42.
- Infraspinous fascia—26: 43.

2. MUSCLES, NERVES, VESSELS, AND LIGAMENTS OF THE SHOULDER.

- Deltoid muscle—25: 63.
- Subcutaneous acromial bursa**—28: 22.
- The subsequent structures are exposed by detaching the deltoid muscle at its origin and reflecting the muscle toward its insertion.
- Subdeltoid bursa—28: 24.
- Subacromial bursa—28: 23.
- Anterior humeral circumflex artery—49: 12.
- Posterior humeral circumflex artery—49: 13.
- Axillary nerve—69: 34.
- Muscular rami—69: 35.
- Lateral cutaneous nerve of the arm**—69: 36.
- Teres major muscle—25: 67.
- Bursa of the teres major muscle**—28: 28.
- Pectoralis major muscle—24: 74. (Insertion only.)
- Latissimus dorsi muscle—23: 17. (Insertion only.)
- Bursa of the latissimus dorsi muscle**—28: 29.
- Coracoacromial ligament—19: 42.
- Acromioclavicular articulation—19: 45.
- Articular capsule—19: 46.

Acromioclavicular ligament—19: 47.

Articular disc—19: 48.

Coracoclavicular ligament—19: 49.

Trapezoid ligament**—19: 50.

Conoid ligament**—19: 51.

The following muscles may be exposed by sawing through the acromion at its junction with the spine of the scapula, dividing the fascia covering the teres minor muscle and reflecting it medially, but guarding at the same time the circumflex artery of the scapula.

Supraspinatous muscle—25: 64.

Teres minor muscle—25: 66.

Infraspinatous muscle—25: 65.

Subscapularis muscle—25: 68.

Bursa of the subscapularis muscle—28: 27.

In demonstrating the following structures the infraspinatous and supraspinatous muscles are divided near their insertions, and both muscles reflected toward their origins.

Bursa of the infraspinatous muscle—28: 26.

Transverse scapular artery—48: 60.

Acromial ramus**—48: 61.

Transverse scapular vein—54: 25.

Suprascapular nerve—69: 31.

Circumflex scapular artery—49: 11.

Superior transverse scapular ligament—19: 43.

Inferior transverse scapular ligament—19: 44.

V. Arm and Superficial Structures of the Forearm and Dorsum of the Hand

1. SURFACE ANATOMY OF ARM AND FOREARM (Pls. 1, 2.)

Lateral bicipital sulcus—5: 19.

Medial bicipital sulcus—5: 20.

Medial margin of the humerus—14: 4.

Medial epicondyle—14: 11.

Groove for the ulnar nerve—14: 8.

Lateral margin of the humerus—14: 5.

Lateral epicondyle—14: 12.

Olecranon—14: 35.

Styloid process of the radius—14: 30.

Dorsal margin of the ulna—14: 44.

Styloid process of the ulna—14: 49.

2. ARM (ANTERIOR ASPECT) AND FOREARM: SUPERFICIAL STRUCTURES.

a. Cutaneous nerves.

Skin incisions: (a) along the mid-line of the anterior surface of the arm and the volar surface of the forearm to the level of the radiocarpal articulation; (b) transversely around the forearm just proximal to the radiocarpal articulation.

Intercostobrachial nerves**—70: 7.

Medial antibrachial cutaneous nerve—69: 45.

- Ulnar ramus—69:47.
- Volar ramus—69:46.
- Medial brachial cutaneous nerve**—69:44.
- Posterior brachial cutaneous nerve**—69:66.
- Dorsal antibrachial cutaneous nerve—69:68.
- Lateral antibrachial cutaneous nerve—69:43.

b. Veins and lymphatics.

- Basilic vein—54:39.
- Cephalic vein—54:37.
- Median vein of the elbow—54:40.
- In cases where the preceding vein is absent, the following veins may take its place:
- Median vein of the forearm—54:41.
- Median basilic vein—54:42.
- Median cephalic vein—54:43.
- Superficial lymph glands of the elbow—56:49.

3. ARM (ANTERIOR ASPECT): DEEP STRUCTURES.

a. Deep fascia.

- Brachial fascia—26:44.
- Lacertus fibrosus—25:73.
- The following fascial septa may be demonstrated by dividing the brachial fascia by a longitudinal incision along the median line of the front of the arm and reflecting the medial and lateral flaps of deep fascia, leaving intact, however, the lacertus fibrosus.
- Medial intermuscular septum of the humerus—26:45.
- Lateral intermuscular septum of the humerus—26:46.

b. Arteries.

- Brachial artery—49:14.
- Deep brachial artery—49:15.
- Superior ulnar collateral artery—49:20.
- Inferior ulnar collateral artery—49:21.

c. Veins.

- Brachial veins—54:34.
- Basilic vein—54:39.
- Cephalic vein—54:37.

d. Nerves.

- Medial brachial cutaneous nerve**—69:44.
- Medial antibrachial cutaneous nerve—69:45. ✓
- Median nerve—69:48.
- Ulnar nerve—69:55.
- Musculocutaneous nerve—69:41.
- Muscular rami—69:42.
- Lateral antibrachial cutaneous nerve—69:43. ✓

e. Muscles.

Biceps brachii muscle—25: 69.

Long head—25: 70. (Not including its origin.)

Short head—25: 72.

Coracobrachialis muscle—25: 74.

Brachialis muscle—25: 75.

4. CUBITAL FOSSA—83: 45.

The following structures are dealt with here only in so far as they are related to the cubital fossa.

Lacertus fibrosus—25: 73.

Brachial artery—49: 14.

Radial artery—49: 22.

Ulnar artery—49: 36.

Tendon of biceps brachii muscle.

Median nerve—69: 48.

Brachialis muscle—25: 75. *insertion, anterior*

Pronator teres muscle—26: 3.

Supinator muscle—26: 24. *radius*

The following structures are exposed by dividing the lacertus fibrosus and widening the space between the pronator teres and brachioradialis muscles.

Radial nerve—69: 65.

Deep ramus—69: 69.

Superficial ramus—69: 71.

Radial recurrent artery—49: 23.

Inferior ulnar collateral artery—49: 21.

Ulnar recurrent artery—49: 47. (Volar.) *any head*

5. ARM: POSTERIOR ASPECT.

Triceps brachii muscle—25: 76. *arises from*

Long head—25: 77.

Lateral head—25: 78. *humerus* ?

Medial head—25: 79.

Radial nerve—69: 65.

Exposed by dividing the lateral head of the triceps muscle along the course of the radial nerve.

Posterior brachial cutaneous nerve**—69: 66.

Muscular rami—69: 67.

Dorsal antibrachial cutaneous nerve—69: 68.

Deep brachial artery—49: 15.

Deltoid ramus**—49: 17.

Middle collateral artery—49: 18.

Radial collateral artery—49: 19.

Nutrient arteries of the humerus—49: 16.

Ulnar nerve—69: 55.

Superior ulnar collateral artery—49: 20.

Inferior ulnar collateral artery—49: 21.

Subtendinous bursa of the olecranon—28: 32.

6. DORSUM OF THE HAND: SUPERFICIAL STRUCTURES.

Skin incisions: (a) along the radial and ulnar margins of the hand; (b) along the middle line of the dorsal aspect of each digit.

Superficial ramus of the radial nerve—69:71. — *we*

Ulnar anastomotie ramus**—69:72.

Dorsal digital nerves—69:73.

Dorsal ramus of the ulnar nerve in the hand—69:57.

Dorsal digital nerves—69:58. — *the inter + under*

Venous network of the back of the hand—54:44.

Dorsal metacarpal veins**—54:49.

Digital venous arch**—54:52.

Dorsal fascia of the hand**—26:50.

Dorsal carpal ligament—26:51. — *radial to pisiform*

VI. Forearm: Volar Aspect and Ulnar Margin

1. DEEP FASCIA AND CUTANEOUS NERVES PIERCING IT.

For the superficial fascia and certain cutaneous nerves of the forearm, see Superior Extremity, V: 2.

Fascia of the forearm—26:49.

Palmar cutaneous ramus of the ulnar nerve**—69:56.

Palmar ramus of the median nerve**—69:51.

Superficial ramus of the radial nerve—69:71.

Volar carpal ligament—26:55. — *midline*

2. RADIAL ARTERY AND NERVE.

Exposed by turning aside the volar ramus of the medial cutaneous nerve of the forearm, the lateral cutaneous nerve of the forearm, the superficial veins, and removing the deep fascia of the forearm except where it gives origin to underlying muscles.

Radial artery—49:22.

Radial recurrent artery—49:23. *cell*

Superficial volar ramus—49:26. *with the radial nerve*

Muscular rami—49:24.

Volar carpal ramus—49:25.

Radial nerve—69:65.

Deep ramus—69:69. (Origin only.)

Superficial ramus—69:71. *nerve*

3. SUPERFICIAL MUSCLES.

Brachioradialis muscle—26:17. *below deltoid - to*

Palmaris longus muscle—26:7. — *fascia, fibrous septa*

Pronator teres muscle—26:3. *fascia*

Humeral head—26:4.

Ulnar head—26:5.

Flexor carpi radialis muscle—26:6. *fascia +*

Flexor carpi ulnaris muscle—26:8.

Humeral head—26:9.

Ulnar head—26:10.

- Flexor digitorum sublimis—26:11.
 Humeral head—26:12.
 Ulnar head—26:13.
4. ULNAR VESSELS AND MEDIAN NERVE.
 Ulnar artery—49:36.
 Recurrent ulnar arteries—49:37.
 Common interosseous artery—49:39.
 Volar interosseous artery—49:42. (Origin only.)
 Dorsal interosseous artery—49:40. (Origin only.)
 Volar carpal ramus—49:46.
 Dorsal carpal ramus—49:45.
 Muscular rami—49:44.
 Ulnar veins—54:36.
 Ulnar nerve—69:55.
 Palmar cutaneous rami**—69:56.
 Dorsal ramus of the hand—69:57.
 Volar ramus of the hand—69:59. (Origin only.)
 Muscular rami—60:64.
 Median nerve—69:48.
 Exposed by reflecting the humeral head of the pronator teres muscle and the radial head of the flexor digitorum sublimis muscle.
 Muscular rami—69:49.
 Volar interosseous nerve of the forearm—69:50. (Origin only.)
 Palmar ramus of the median nerve**—69:51. (Origin only.)
5. DEEP STRUCTURES ON THE VOLAR ASPECT OF THE FOREARM.
 Flexor digitorum profundus muscle—26:14.
 Flexor pollicis longus muscle—26:15.
 Pronator quadratus muscle—26:16.
 Volar interosseous artery—49:42.
 Median artery**—49:43.
 Muscular rami—49:44.
 Volar interosseous nerve—69:50.

VII. Wrist and Hand: Volar Aspect

1. SURFACE ANATOMY. (Pls. 1, 2.)
 Thenar eminence—5:32.
 Hypothenar eminence—5:33.
 Tubercle of the navicular bone—14:54.
 Tubercle of the greater multangular bone—14:59.
 Pisiform bone—14:57.
 Metacarpal bones—14:68.
 Phalanges—14:74.
2. FASCIA AND CUTANEOUS NERVES.
 Skin incisions: (a) longitudinally along the middle line of the palm; (b) transversely at the level of the proximal ends of the interdigital clefts from the radial to the ulnar margin of the hand; (c) longitudinally along the middle line of each digit.

- Superficial fascia—23 : 36.
- Palmaris brevis muscle—26 : 29.
- Palmar branch of the median nerve—69 : 51.
- Palmar cutaneous branch of the ulnar nerve—69 : 56.
- Superficial branch of the radial nerve—69 : 71.
- Palmar aponeurosis—26 : 52.
- Transverse fasciculi—26 : 53.
- Volar carpal ligament—26 : 55.

3. MUSCLES, NERVES, VESSELS, AND LIGAMENTS.

a. Nerves and vessels superficial to the muscles and flexor tendons of the palm.

Exposed by dividing the proximal part of the palmar aponeurosis transversely, reflecting it distally and then removing the entire aponeurosis together with the palmaris brevis muscle and the volar carpal ligament.

- Superficial volar arch—49 : 48.
- Superficial volar ramus of the radial artery—49 : 26.
- Common volar digital arteries—49 : 49.
- Proper volar digital arteries—49 : 50.
- Median nerve—69 : 48.
- Muscular rami—69 : 49.
- Common volar digital nerves—69 : 53.
- Proper volar digital nerves—69 : 54.
- Volar ramus of the ulnar nerve in the hand—69 : 59.
- Deep ramus—69 : 63. (Origin only.)
- Superficial ramus—69 : 60.
- Common volar digital nerves—69 : 61.
- Proper volar digital nerves—69 : 62.

b. Ligaments and mucous sheaths of the flexor tendons.

- Transverse carpal ligament—26 : 54.
- Vagina tendinum mm. flexorum communium—28 : 48.
- Vagina tendinis m. flexoris pollicis longi—28 : 49.
- Vaginal ligaments of the digits—26 : 59.
- Annular ligaments of the digits—26 : 60.
- Cruciate ligaments of the digits—26 : 61.
- Vinculum tendinum—26 : 57.
- Carpal canal—20 : 24.
- Chiasma tendinum—26 : 56.

c. Muscles.

- Lumbricales muscles—26 : 37.

Exposed by dividing the superficial volar arch just distal to the deep ramus of the ulnar artery and also at its junction with the superficial volar ramus of the radial artery and reflecting the arch distally, dividing the median nerve at the level of the wrist and reflecting it distally, and dividing the flexor digitorum sublimis muscle at the middle of the forearm and reflecting the distal part toward its insertion.

The demonstration of the following structures may be completed by dividing the flexor digitorum profundus in the forearm and reflecting it and the lumbricales muscles toward their insertions, noting at the same time the muscular rami from the deep branch of the ulnar nerve to the two (ulnar) lumbrical muscles.

Abductor pollicis brevis muscle—26 : 30.

Flexor pollicis brevis muscle—26 : 3.

Opponens pollicis muscle—26 : 32.

Abductor pollicis muscle—26 : 33.

Abductor digiti quinti muscle—26 : 34.

Flexor digiti quinti brevis muscle—26 : 35.

Opponens digiti quinti muscle—26 : 36.

d. Nerves and vessels, deep to the flexor tendons and muscles of the palm.

Deep ramus of the ulnar nerve—69 : 63.

Muscular rami—69 : 64.

Deep volar arch—49 : 33.

Volar metacarpal arteries—49 : 34.

Perforating rami—49 : 35.

Princeps pollicis artery—49 : 31.

Demonstrated by detaching the adductor pollicis muscle at its origin and reflecting it toward its insertion.

Volar radial artery of the index digit—49 : 32.

VIII. Forearm: Dorsal Aspect and Radial Margin

1. FASCIA, MUSCLES, NERVES, AND VESSELS.

a. Deep fascia of forearm.

For the superficial fascia, cutaneous nerves and superficial vessels, see Superior Extremity, V : 2.

Fascia of forearm—26 : 49.

Dorsal carpal ligament—26 : 51.

b. Superficial muscles.

Exposed by removing the deep fascia from the dorsum of the forearm, except where it gives origin to subjacent muscles as in the region of the elbow (retaining intact, however, the dorsal carpal ligament).

Brachioradialis muscle—26 : 17.

Extensor carpi radialis longus muscle—26 : 18.

Extensor carpi radialis brevis muscle—26 : 19.

Vagina of the extensor carpi radialis brevis muscle—28 : 38.

Extensor digitorum communis muscle—26 : 20.

Extensor digiti quinti proprius muscle—26 : 22.

Anconaeus muscle**—26 : 1.

Extensor carpi ulnaris muscle—26 : 23.

c. Nerves and vessels.

Exposed by dividing the extensor digitorum communis and extensor digiti quinti muscles at the middle of the forearm, and reflecting the

proximal and distal segments of the divided muscles toward their origin and insertion, respectively.

Dorsal interosseous artery—49 : 40.

Recurrent interosseous artery—49 : 41.

Arterial network of the elbow—49 : 38.

Volar interosseous artery—49 : 42.

Deep ramus of the radial nerve—69 : 69.

Dorsal interosseous nerve—69 : 70.

d. Deep muscles.

Abductor pollicis longus muscle—26 : 25.

Extensor pollicis brevis muscle—26 : 26.

Vagina tendinum mm. abductor longi et extensoris pollicis brevis—28 : 37.

Extensor pollicis longus muscle—26 : 27.

Vagina tendinis m. extensoris pollicis longi—28 : 39.

Extensor indicis proprius muscle—26 : 28.

Supinator muscle—26 : 24.

IX. Wrist and Hand: Dorsal Aspect

1. MUSCLES, NERVES, AND VESSELS.

a. Vessels.

For the cutaneous nerves and superficial vessels see Superior Extremity, V : 6.

Radial artery—49 : 22.

Dorsal carpal ramus—49 : 27.

Dorsal carpal rete—49 : 28.

Dorsal metacarpal arteries—49 : 29.

Dorsal digital arteries—49 : 30.

Perforating rami—49 : 35.

b. Muscles, nerves, and ligaments.

Dorsal carpal ligament—26 : 51.

Juncturae tendinum—26 : 21.

Dorsal interosseous nerve—69 : 70.

Transverse ligaments of the heads of the metacarpal bones—20 : 41.

Volar interosseous muscles—26 : 39.

Dorsal interosseous muscles—26 : 38.

Flexor pollicis brevis muscle—26 : 31. (Deep head.)

Demonstrated by reflecting the radial head of the first dorsal interosseous muscle.

X. Articulations of the Superior Extremity

1. SHOULDER JOINT—19 : 58.

Articular capsule—19 : 59.

Coracohumeral ligament—19 : 61.

Glenoid lip—19 : 60.

Long head of the biceps muscle—25 : 70.
Synovial membrane—18 : 32.
Intertubercular mucous sheath—25 : 71.
Bursa subscapularis—28 : 28.

2. ELBOW JOINT—19 : 62.

Articular capsule—19 : 66.
Ulnar collateral ligament—19 : 67.
Radial collateral ligament—19 : 68.
Synovial membrane—18 : 32.
Humeroulnar articulation—19 : 63.
Humeroradial articulation—19 : 64.

3. JOINT OF THE HAND—20 : 8.

a. Radiocarpal articulation—20 : 9.

Articular capsule—20 : 11.
Dorsal radiocarpal ligament—20 : 12.
Volar radiocarpal ligament—20 : 13.
Ulnar collateral carpal ligament—20 : 15.
Radial collateral carpal ligament—20 : 16.

b. Intercarpal articulation—20 : 10.

Articular capsule—20 : 11.
Radiate carpal ligament**—20 : 14.
Dorsal intercarpal ligaments**—20 : 17.
Volar intercarpal ligaments**—20 : 18.
Interosseus intercarpal ligaments**—20 : 19.

4. PISIFORM ARTICULATION—20 : 20.

Articular capsule—20 : 21.
Pisohamate ligament**—20 : 22.
Pisometacarpal ligament**—20 : 23.
Carpal canal—20 : 24.

5. RADIOULNAR ARTICULATIONS.

Proximal radioulnar articulation—19 : 65.
Annular ligament of the radius—19 : 69.
Recessus sacciformis—20 : 1.
Distal radioulnar articulation—20 : 4.
Articular disc—20 : 6.
Articular capsule—20 : 5.
Recessus sacciformis—20 : 7.
Interosseous membrane of forearm—20 : 2.
Oblique cord—20 : 3.

6. CARPOMETACARPAL ARTICULATIONS—20 : 25.

Articular capsules—20 : 32.
Dorsal carpometacarpal ligaments—20 : 27.

- Volar carpometacarpal ligaments—20 : 28.
- Carpometacarpal articulation of the thumb—20 : 29.
- Articular capsule—20 : 30.

7. INTERMETACARPAL ARTICULATIONS—20 : 31.

- Articular capsules—20 : 32.
- Dorsal basal ligaments—20 : 33.
- Volar basal ligaments—20 : 34.
- Interosseous basal ligaments—20 : 35.

8. METACARPOPHALANGEAL ARTICULATIONS—20 : 37.

- Articular capsules—20 : 38.
- Collateral ligaments—20 : 39.
- Volar accessory ligaments—20 : 40.
- Transverse ligaments of the heads of the metacarpal bones—
20 : 41.

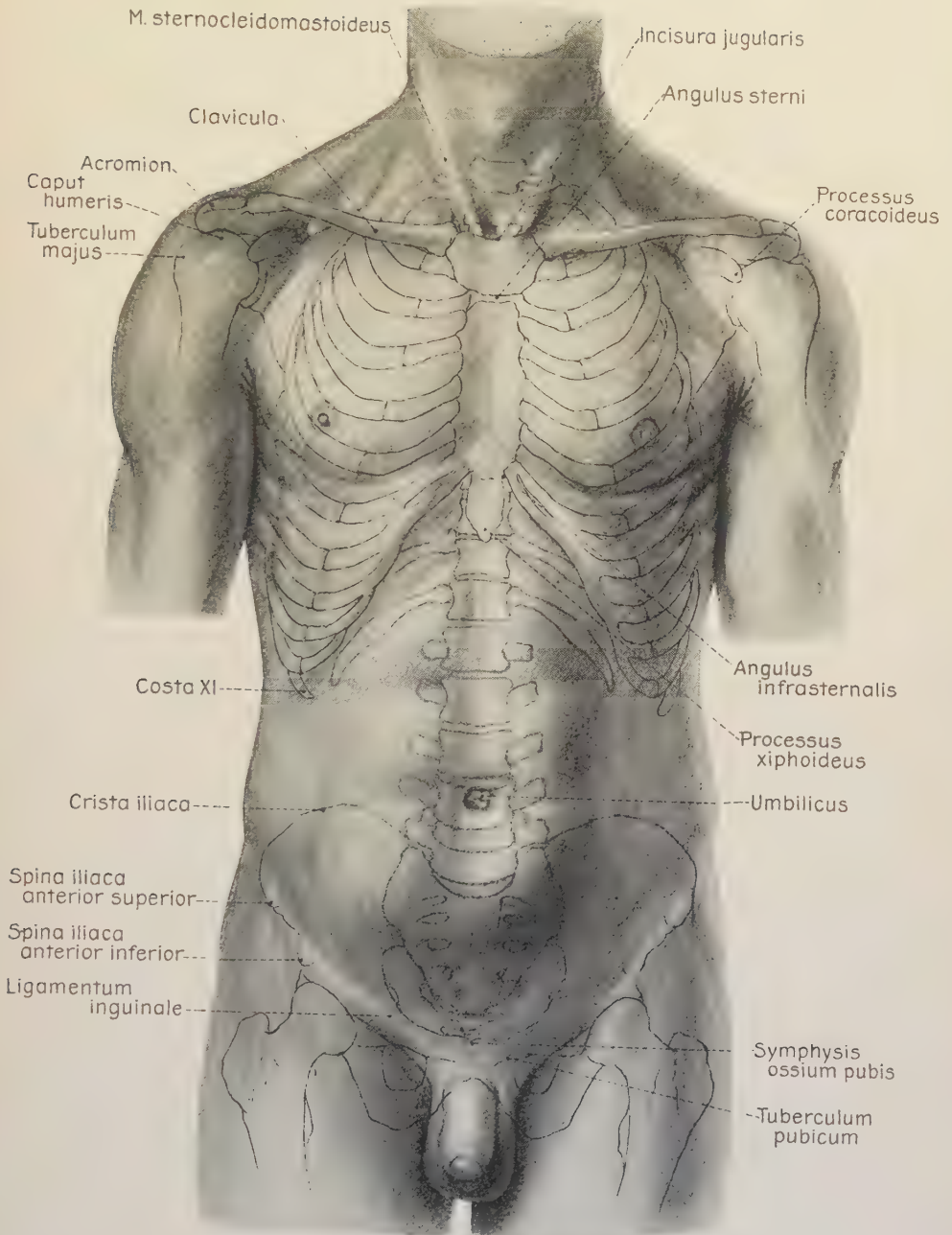
9. ARTICULATIONS OF THE DIGITS—20 : 42.

- Articular capsules—20 : 43.
- Collateral ligaments—20 : 44.

THORAX
AND DEEP STRUCTURES OF THE BACK

PLATE 3

Anterior aspect of the trunk showing surface anatomy and surface projection of the skeleton in relation to the thorax, abdomen and pelvis.



THORAX AND DEEP STRUCTURES OF THE BACK

I. General Characteristics

1. SUBDIVISIONS OF THORAX AND BACK.

Thorax—4: 47.

(For osteology of the thorax see 7: 27-64.)

Thoracic cavity—4: 48.

Breast—4: 49.

Mamma—4: 50.

Mammary papilla—4: 51.

Back—4: 52.

Vertebral column—4: 53.

Spinal canal—4: 54.

2. SURFACE ANATOMY.

For the surface anatomy of the thorax and back see Superior Extremity, I: 1, and II: 1.

3. GENERAL OSTEOLOGICAL CHARACTERISTICS OF THORAX.

Thoracic cavity—7: 58.

Superior aperture of the thorax—7: 59.

Inferior aperture of the thorax—7: 60.

Costal arches—7: 61. — *arcus costalis*

Intercostal spaces—7: 62.

Infrasternal angle—7: 63.

4. REGIONS OF THORAX AND BACK.

For regions of the thorax and back refer to Superior Extremity, I: 2 and II: 2, and plates 11 and 12.

II. Thoracic Wall: Anterior and Lateral Parts

1. INTERCOSTAL MUSCLES, LIGAMENTS, AND NERVES.

For structures of the thoracic wall external to the costal arches and intercostal muscles see Superior Extremity, II: 3, 4.

External intercostal muscles—25: 5.

External intercostal ligaments—19: 32.

Internal intercostal muscles—25: 6.

Exposed by dividing the external intercostal muscles and external intercostal ligaments along the inferior margins of the intercostal spaces and reflecting the muscles and ligaments upward. Guard subjacent pleura.

Internal intercostal ligaments—19: 33.

Anterior rami (intercostal nerves) of thoracic nerves—70: 1.

Muscular rami—70: 2.

Lateral cutaneous rami—70: 3.

Posterior and anterior rami—70: 4, 5.

Lateral mammary rami**—70: 6.

Intercostobrachial nerves—70: 7.
 Anterior cutaneous rami—70: 8.
 Medial mammary rami**—70: 9.

2. BLOOD VESSELS

- 112 Highest intercostal artery—48: 63.
 Intercostal arteries—48: 59.
 Anterior rami—49: 65.
 Muscular rami—49: 66.
 Lateral cutaneous rami—49: 67.
 Posterior rami—49: 68.
 Anterior rami—50: 1.
 Lateral mammary rami—50: 2.
 Anterior cutaneous rami—50: 3.
 Medial mammary rami—50: 4.
 Posterior rami—49: 60. (See also Superior Extremity, I: 3.)
 Intercostal veins—54: 56.
 Internal mammary artery—48: 34.
 Exposed by removing the intercostal muscles and ligaments from the anterior ends of the intercostal spaces, guarding against injury to the pleura.
 Sternal rami—48: 39.
 Perforating rami—48: 40.
 Mammary rami**—48: 41.
 Muscular rami**—48: 42.
 Cutaneous rami**—48: 43.
 Intercostal rami—44: 45.
 Sternal lymph glands—56: 56.
 Musculophrenic artery—48: 46.
 Exposed by cutting away the medial end of the sixth costal cartilage.
 Superior epigastric artery—44: 47. (Its origin only.)
 472 Internal mammary vein—52: 65.
 Transverse thoracic muscle—25: 8.

III. Thoracic Cavity and Viscera

1. PLEURA AND PLEURAL CAVITIES.

1082 The pleura may be exposed by removing the intercostal muscles, separating the pleura from the internal surfaces of the sternum and ribs, and with a saw and bone-forceps, removing the sternum and costal arches by the following incisions, but retaining the pleura intact: (a) transversely through the sternum at the level of the lower margin of the first costosternal junction; (b) transversely through the sternum at the level of the upper margin of the sixth costosternal junction; (c) dividing the second, third, fourth, and fifth ribs at the junction of the middle and posterior thirds of each.

Endothoracic fascia—38: 2.

The pericardium may be identified by inserting the finger between the lines of sternal reflection of the right and left pleurae and passing it through the areolar tissue of the anterior mediastinal cavity.

Incisions through the pleura exposing the pleural cavity: (a) longitudinally through the costal pleura midway between the sternum and vertebral column extending from the first to the sixth rib; (b) transversely along the

inferior margin of the first rib and along the superior margin of the sixth rib, extending medially to within about 2 cm. of the line of sternal reflection of the pleura and laterally to the line of the cut ends of the second to fifth ribs.

Pulmonary ligament—38: 16. 1085

Cupula of pleura—38: 5.

Pulmonary pleura—38: 6.

Parietal pleura—38: 7.

Costal pleura—38: 11.

Mediastinal pleura—38: 8.

Mediastinal layers—38: 9.

Pericardial pleura—38: 10.

Diaphragmatic pleura—38: 12.

Pleural sinuses—38: 13.

Phrenicocostal sinus—38: 14.

Costomediastinal sinus—38: 15.

Adipose folds—38: 17.

Pleural villi—38: 18.

Mediastinal septum—38: 19.

Anterior mediastinal cavity—38: 20.

Posterior mediastinal cavity—38: 21.

2. LUNGS. — 109 ..

The lung may be removed by dividing its root close to the medial surface of the lung.

a. Surface anatomy of lungs.

Base of lung—37: 57.

Apex of lung—37: 58.

Costal surface—37: 60.

Mediastinal surface—37: 61.

Diaphragmatic surface—37: 62.

Anterior margin—37: 63.

Inferior margin—37: 64.

Hilus of lung—37: 65.

Root of lung—37: 66.

Subclavian groove—37: 59.

Interlobar incisure—37: 71.

Superior lobe—37: 68.

Middle lobe—37: 69.

Inferior lobe—37: 70.

Cardiac notch—37: 67.

b. Internal structure of lungs.

Bronchi—37: 41.

May be demonstrated by tearing and removing parts of the pulmonary tissue and following the bronchi and blood vessels and their subdivisions as far as possible into the substance of the lung.

—Bronchioles—37: 74.

—Respiratory bronchioles—37: 75.

- Alveolar ductules—37: 76.
- Pulmonary alveoli—37: 77.
- Bronchial lymph glands—37: 78.
- Bronchial lymphatic nodules—37: 79.
- 370. Pulmonary lymph glands—37: 80.

3. ROOT OF LUNG AND RELATED STRUCTURES.

a. Structures in relation to the right and left roots.

Anterior:

- 160 Anterior pulmonary plexus of the vagus nerve—68: 45.
- Phrenic nerve—69: 21. 726, 787
- 914 Pericardiacophrenic artery—48: 38.

Posterior:

- 198 Vagus nerve—68: 22.
- Posterior pulmonary plexus of the vagus nerve—68: 46.

Inferior:

- Pulmonary ligament—38: 16.

In relation to the right root only:

- Azygos vein—54: 53.
- Superior vena cava—52: 50.

In relation to the left root only:

- 881 Aortic arch—46: 49.
- 187 Descending aorta—46: 51.

b. Structures within the root of each lung.

- 927 Bronchial arteries—49: 53.
- Pulmonary artery—46: 40.
- Right and left rami—46: 41, 42.
- Pulmonary veins—52: 37.
- Right and left pulmonary veins—52: 38, 39.
- Bronchus, right and left—37: 47.
- Bronchial rami—37: 48.
- Eparterial bronchial ramus—37: 49.
- Hyparterial bronchial rami—37: 50.
- Bronchial lymph glands—56: 52.

4. PHRENIC NERVE AND NERVES TO THE SUPERFICIAL PART OF THE CARDIAC PLEXUS.

- 726 Phrenic nerve—69: 21. 787
- Pericardiac ramus—69: 22.
- Phrenicoabdominal rami—69: 23.

Nerves in relation to the superficial part of the cardiac plexus:

Superior cardiac nerve—71: 59. (From the cervical sympathetic.)

Superior cardiac ramus—68: 34. (Inferior cervical cardiac ramus. From the left vagus nerve.)

Cardiac ganglion—72: 11.

5. THYMUS—38: 31.

Usually in a condition of atrophy in the adult, but showing the following structures in the child:

Right and left lobes—38:32.

Central tract—38:33.

Lobules of the thymus—38:34. (1) lobes is n

6. PERICARDIUM.

Sternopericardial ligaments—45:43. (8)

Incisions exposing the pericardial cavity: (a) longitudinally through the pericardium from the aorta to the diaphragm; (b) transversely from the middle of the right to the middle of the left root of the lung.

Pericardium—45:41.

Epicardium—45:45.

Pericardial fluid—45:42.

Transverse sinus of the pericardium—45:44.

7. GREAT VEINS OF THE THORAX AND THEIR TRIBUTARIES.

Superior vena cava—52:50.

Right and left innominate veins—52:51.

Inferior thyreoid veins—52:52. (Termination only.)

Thyreoides ima vein—52:53.

The first five of the following tributaries are small and usually difficult to demonstrate:

Thymic veins**—52:56.

Pericardiac veins**—52:57.

Superior phrenic veins—52:58.

Anterior mediastinal veins**—52:59.

Anterior bronchial veins**—52:60.

Vertebral vein—52:63. (Termination only.)

Internal mammary vein—52:65.

Highest intercostal vein—52:68.

Azygos vein—54:53.

Inferior vena cava—55:3.

8. HEART AND AORTA.

a. Surface anatomy.

Apex of heart—45:36.

Sternocostal surface—45:34.

Diaphragmatic surface—45:35.

Right atrium—46:1.

Right auricle—46:7.

Left atrium—46:26.

Left auricle—46:27.

Right ventricle—46:13.

Left ventricle—46:29.

Coronary sulcus—45:40.

Anterior longitudinal sulcus—45:38.

Posterior longitudinal sulcus—45:39.

Notch at apex of heart—45:37.

b. Nerve and vascular supply.

Right coronary artery of the heart—46:52.

Posterior descending ramus—46:53.

Left coronary artery of the heart—46:54.

Circumflex ramus—46:55.

Anterior descending ramus—46:56.

Coronary sinus—52:41.

Its exposure may sometimes be facilitated by severing the inferior vena cava at its termination.

Great cardiac vein—52:42.

Posterior vein of left ventricle—52:43.

Oblique vein of left atrium—52:44.

Middle cardiac vein—52:46.

Small cardiac vein—52:47.

Anterior veins of the heart—52:48.

Smallest veins of the heart—52:49.

Anterior coronary plexus—72:10.

Posterior coronary plexus—72:12.

c. Cavities of the heart. Pulmonary vessels.

Right atrium—46:1.

Incisions exposing the cavity of the right atrium: (a) longitudinally from a point just anterior to the superior vena cava, downward and backward to the inferior vena cava; (b) from the middle point of the preceding incision obliquely upward to the tip of the right auricle.

Epicardium—45:45. — *outer layer, rough*

Myocardium—45:46. *muscle*

Endocardium—45:47. *smooth inner surface*

Vulcus terminalis of right atrium—46:3.

Crista terminalis—46:4.

Sinus venarum [cavarum]—46:5. — *great vein enters*

Pectinate muscles—46:2.

Intervenous tubercle—46:8.

Septum of the atria—45:54.

Membranous part—45:55.

Fossa ovalis—46:10. *aperture*

Limbus fossae ovalis—46:6.

Valve of the inferior vena cava—46:9.

Valve of the coronary sinus—46:11.

Venous orifice—45:56. — *opening tricuspid*

Foramina of the smallest cardiac veins—46:12.

Right ventricle—46:13.

Incisions exposing the cavity of the right ventricle: (a) from the diaphragmatic surface of the heart upward, $\frac{1}{2}$ cm. to the right of and parallel with the anterior longitudinal sulcus, to the origin of the pulmonary artery; (b) from the upper end of the preceding incision transversely to the right, parallel with and 1 cm. inferior to the coronary sulcus.

Conus arteriosus—46:19.

Supraventricular crest—46:18.

Venous orifice—45:56.

Tricuspid valve—46:14.

Anterior cusp—46:15.

673

- Posterior cusp—46:16.
 Medial cusp—46:17.
 813 Papillary muscles—45:60.
 Chordae tendinae—45:61.
 Trabeculae carnae—45:58.
 Pulmonary artery—46:40.
 Right and left ramus—46:41, 42.
 — Ligamentum arteriosum—46:44.
 Ductus arteriosus*—46:43.
 Arterial orifice [of right ventricle]—45:57.
 Semilunar valves of pulmonary artery—46:20.
 Anterior, right, and left semilunar valves—
 46:21-23.
 Nodules of the semilunar valves—46:24.
 Lunulae of the semilunar valves—46:25.

Left atrium—46:26.

The cavity and vascular communications of the left atrium may be exposed by dividing the inferior vena cava, turning the heart upward and making an incision through the left atrial wall extending from the middle of its posterior margin forward to the tip of the left auricle.

Valve of the foramen ovalis—46:28.

Left ventricle—46:29.

Incisions exposing the cavity of the left ventricle: (*a*) beginning near the coronary sulcus anteriorly and extending parallel and 1 cm. to the left of the anterior longitudinal sulcus to the apex of the heart; (*b*) beginning posteriorly near the coronary sulcus and extending parallel and 1 cm. to the left of the posterior longitudinal sulcus and joining the end of the first incision at the apex of the heart.

Trabeculae carnae—45:58.

Papillary muscles—45:60.

Chordae tendineae—45:61.

Venous orifice—45:56.

Arterial orifice—45:57.

Bicuspid valve—46:30.

Anterior and posterior cusps—46:31, 32.

Ventricular septum—45:49.

Muscular septum of ventricle—45:50.

Membranous septum of ventricle—45:51.

d. Aorta and its branches.

Ascending aorta—46:46.

Bulb of aorta—46:47.

Sinus of aorta—46:48.

Right and left coronary arteries—46:52, 54.

Aortic arch—46:49.

Isthmus of aorta—46:50.

886 Innominate artery—46:57.

(Thyreoida ima artery)—46:58.

Common carotid artery [left]—46:59.

Subclavian artery [left]—48:20.

Descending aorta [thoracic portion]—46:51. (Origin only.)

Semilunar valves of aorta—46:33.

Right, left and posterior semilunar valves—46:34-36.

Nodules and lunulae of the semilunar valves—46:37, 38.

e. Myocardium and fibrous rings of the heart.

The subsequent structures are exposed to better advantage after the great blood vessels have been divided near their juncture with the heart and the heart removed.

Atrioventricular bundle of His.

Demonstrated more favorably in a sheep or ox heart.

Fibrous rings—45:63.

Exposed by removing the atria of the heart.

Fibrous trigones—45:62.

f. Cardiac plexus.

For the superficial part of the cardiac plexus, see III:4.

The following nerves entering into the formation of the deep part of the cardiac plexus may be exposed by dividing the aortic arch at its junction with the descending aorta and turning aside the aortic arch.

Middle cardiac nerve of sympathetic system—71:61.

Inferior cardiac nerve of sympathetic system—71:64.

Superior cardiac nerves of vagus—68:34.

(Depressor nerve)—68:35.

Inferior cardiac rami of the recurrent nerve—68:37.

Cardiac plexus—72:9.

9. TRACHEA AND BRONCHI.

Bronchial lymph glands—56:52.

Trachea—37:41.

Bifurcation of the trachea—37:46. 1294

Right and left bronchi—37:47.

Bronchooesophageal muscle**—32:72.

10. POSTERIOR MEDIASTINAL CAVITY AND STRUCTURES WITHIN IT.

Posterior mediastinal cavity—38:21.

The following structures may be exposed, so far as they are in relation to the posterior mediastinal cavity, by making a longitudinal incision through the posterior wall of the pericardial cavity and reflecting the pericardium.

Vagus nerve—68:22.

Recurrent nerve—68:36.

Anterior and posterior bronchial rami—68:43, 44.

Anterior and posterior pulmonary plexuses—68:45, 46.

Cf. Thorax, III:3.

Oesophageal rami—68:47.

Anterior and posterior oesophageal plexuses—68:48, 49.

Oesophagus—32:68. (Thoracic part.)

Thoracic aorta—49:51.

- Visceral rami—49:52.
- Bronchial arteries—49:53.
- Oesophageal arteries—49:54.
- Pericardiac rami**—49:55.
- Parietal rami—49:56.
- Mediastinal rami**—49:57.
- Superior phrenic arteries—49:58. —
- Intercostal arteries—49:59.
- Guard against injury to sympathetic trunk.

Thoracic duct—56:25.

Posterior mediastinal lymph glands—56:54.

IV. Thoracic Wall: Posterior Part

1. THORACIC PART OF THE SYMPATHETIC NERVOUS SYSTEM.

Exposed by removing the parietal pleura from the posterior part of the thoracic wall.

Sympathetic trunk—71:30.

Thoracic ganglia—72:2.

Rami communicantes—68:72.

Great splanchnic nerve—72:3.

Splanchnic ganglion—72:4.

Small splanchnic nerve—72:5.

(Lowest splanchnic nerve)—72:7.

2. STRUCTURES IN RELATION TO THE INTERNAL SURFACE OF THE POSTERIOR THORACIC WALL.

Subcostal muscles**—25:7. (Not constant in degree of development.)

Internal intercostal muscles—25:6.

Intercostal arteries—49:59.

Highest intercostal artery—48:63.

Intercostal nerves—70:1.

Intercostal veins—54:56.

Highest intercostal vein**—52:68.

Azygos vein—54:53.

3968 Hemiazygos vein—54:54. — appendages TV.

The following veins are variable in their relationship and degree of development:

Accessory hemiazygos vein—54:55. — 4 to 8 left Post. intercostal

Oesophageal veins**—54:59.

Posterior bronchial veins**—54:60.

V. Deep Structures of the Back

1. POSTERIOR SERRATI MUSCLES AND THE LUMBODORSAL FASCIA.

For the muscles and related structures external to the posterior serrati muscles, see Superior Extremity, I:3, 4.

For the structures of the back of the neck, see Head and Neck, IV:2-4.

39 Serratus posterior superior muscle—23:22. — last C+

Serratus posterior inferior muscle—23:21.

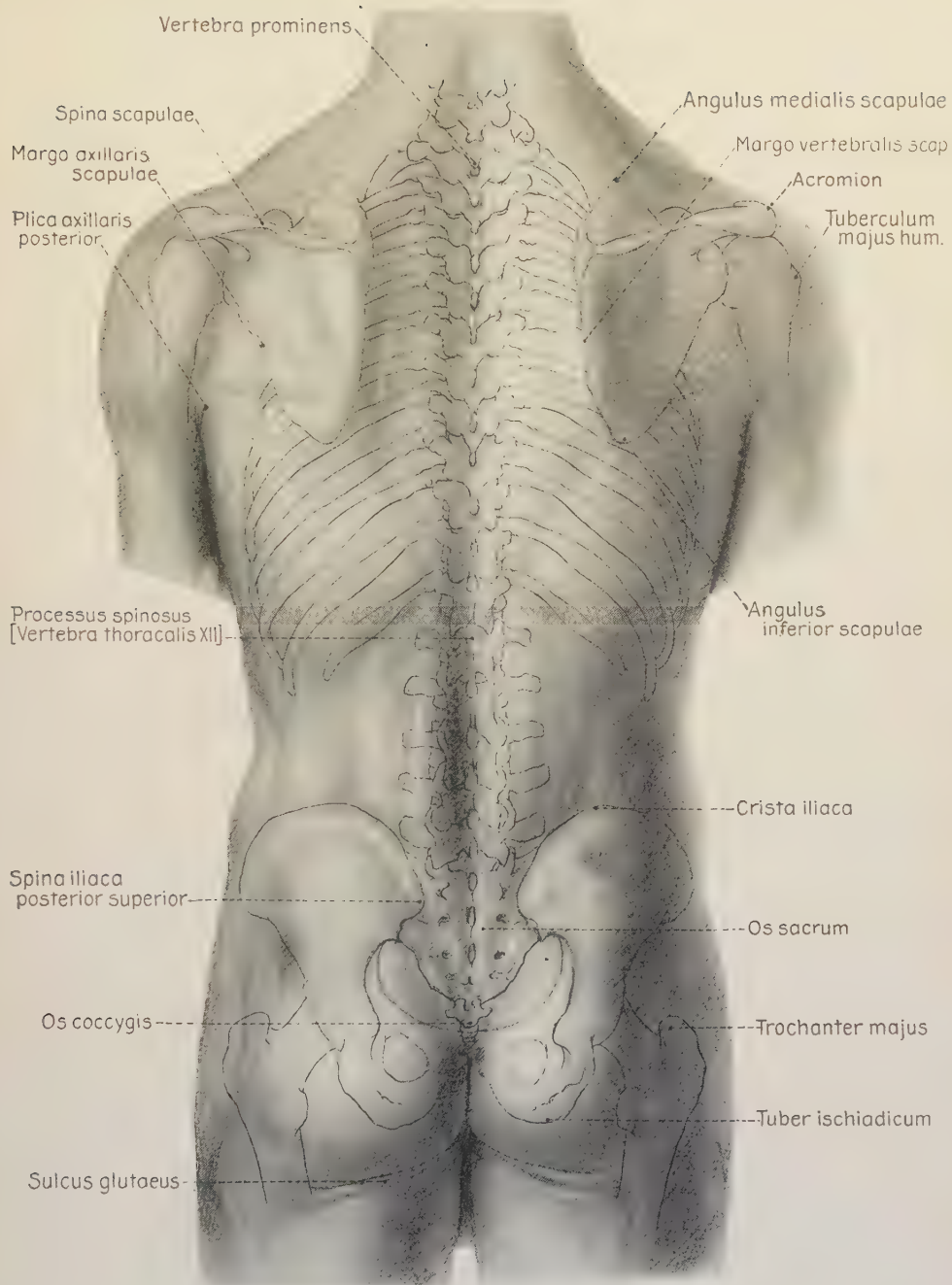
Lumbodorsal fascia—24:5.

A longitudinal incision through its posterior layer and a medial displacement of the subjacent sacrospinalis muscle exposes its anterior

1. — — — — —

PLATE 4

Posterior aspect of the trunk showing surface anatomy and surface projection of the skeleton in relation to the thorax, abdomen and pelvis.



layer. A longitudinal incision through this anterior (designated middle by some authors) layer close to its attachment to the tips of the transverse processes and a medial displacement of the lateral margin of the subjacent quadratus lumborum muscle exposes the transversalis fascia.

2. INTRINSIC MUSCLES OF THE BACK.³

For the corresponding muscles of the neck see Head and Neck, IV: 3.

Sacrospinalis muscle—23: 25.

Iliocostalis muscle—23: 26.

Demonstrated by successive lateral eversions of its inferior, middle and superior subdivisions, guarding the nerves and vessels emerging between the iliocostalis and the longissimus dorsi muscles.

Iliocostalis lumborum muscle**—23: 27.

Iliocostalis dorsi muscle**—23: 28.

Iliocostalis cervicis muscle**—23: 29. (Origin only.)

Longissimus muscle—23: 30.

Longissimus dorsi muscle**—23: 31.

Longissimus cervicis muscle**—23: 32. (Origin only.)

Longissimus capitis muscle**—23: 44. (Thoracic origin only.)

Spinalis muscle**—23: 45.

Spinalis dorsi muscle**—23: 46.

Semispinalis muscle**—23: 49.

Exposed by removing the spinalis dorsi muscle and reflecting the longissimus dorsi muscle laterally.

Semispinalis dorsi muscle**—23: 50.

Semispinalis cervicis muscle**—23: 51. (Thoracic portion only.)

Multifidus muscle**—23: 53.

Demonstrated by detaching the semispinalis muscle at its insertion and reflecting it laterally.

Rotatores muscle**—23: 54.

Exposed by removing the multifidus muscle, guarding against injury to thoracic and lumbar nerves and vessels.

Rotatores longi muscle**—23: 55.

Rotatores breves muscle**—23: 56.

The following muscles are not so well developed in the back as in the neck:

Interspinalis muscles**—23: 57.

Intertransversarii muscles**—23: 58.

Intertransversarii mediales muscles**—23: 60.

Intertransversarii laterales muscles**—23: 59.

3. NERVES AND BLOOD VESSELS.

Posterior rami of thoracic nerves—69: 75.

Lateral cutaneous rami**—69: 76.

Medial cutaneous rami**—69: 77.

³ Many of the structures indicated in sections 2 to 6 may also be demonstrated as exposed in a cross-section of the posterior thoracic wall made at about the level of the fourth thoracic vertebra.

Posterior rami of lumbar nerves—70:12.

Medial ramus**—70:13.

Lateral ramus**—70:14.

Posterior rami of sacral and coccygeal nerves—70:18.

Posterior rami of intercostal arteries—49:60.

Muscular rami**—49:62.

Medial cutaneous rami**—49:63.

Lateral cutaneous rami**—49:64.

Dorsal rami of the highest intercostal artery**—48:64.

Dorsal ramus of lumbar arteries**—50:10.

Dorsal ramus of intercostal veins**—54:57.

The lumbar veins also have dorsal tributaries from the back comparable to the dorsal rami of the lumbar arteries.

4. VERTEBRAL CANAL: BLOOD VESSELS AND MENINGES.

The contents of the vertebral canal may be exposed by cutting through the laminae of the vertebral arches close to the articular processes, dividing the ligamentum flava and removing the posterior wall of the vertebral canal.

Ligamenta flava—18:40.

Supraspinous ligament—18:44.

Interspinous ligaments—18:43.

Arteries supplying the vertebral column:

Spinal ramus of posterior rami of intercostal arteries**—49:61.

Spinal ramus of lumbar arteries**—50:11.

Cavum epidurale—65:42.

Dura mater spinalis—65:40.

Filum durae matris spinalis—65:41.

The following structures may be exposed by making a median incision through the dura, guarding against injury to the subjacent arachnoidea.

Cavum subdurale—65:43.

Pia mater spinalis—65:54.

Arachnoidea spinalis—65:44.

Cavum subarachnoideale—65:46.

Ligamentum denticulatum—65:55.

5. SPINAL CORD: NERVES, BLOOD VESSELS, AND SURFACE ANATOMY.

For the cervical part of the spinal cord see Head and Neck, IX:4.

a. *Spinal nerves.*

Thoracic nerves—69:74.

Lumbar nerves—70:10.

Sacral nerves—70:17.

Coccygeal nerves—70:17.

Cauda equina—68:74.

Anterior root—68:67.

Posterior root—68:68.

Filia radicularia—68:66.

Spinal ganglion—68:69.

Anterior ramus—68:70.

Posterior ramus—68:71.

Ramus meningeus**—68:73. (Difficult to demonstrate.)

In demonstrating the remaining structures of the spinal cord, the spinal nerve trunks may be cut, the cord divided transversely at about the level of the first thoracic vertebra, and the cord, and its membranes removed from the vertebral canal.

b. Blood vessels of the spinal cord. (Usually difficult to demonstrate.)

Spinal rami of posterior rami of intercostal arteries**—49:61.

Spinal rami of lumbar arteries**—50:11.

Spinal ramus of iliolumbar artery**—50:60.

Spinal rami of lateral sacral artery**—50:63.

Internal spinal veins**—55:2.

Posterior external spinal veins**—55:1.

Anterior external spinal veins**—54:70.

Intervertebral veins—54:69.

c. Surface anatomy of the spinal cord.

Thoracic part—58:23.

Lumbar part—58:24.

Lumbar enlargement—58:25.

Medullary cone—58:26.

Ventriculus terminalis—58:28.

Filum terminale—58:27.

Anterior median fissure—58:29.

Posterior median sulcus—58:30.

Anterior lateral sulcus—58:31.

Posterior lateral sulcus—58:32.

Posterior intermediate sulcus—58:33.

(Anterior intermediate sulcus)—58:34.

Funiculi of the spinal cord—58:45.

Anterior funiculus—58:36.

Lateral funiculus—58:37.

Posterior funiculus—58:38.

6. SPINAL CORD: INTERNAL STRUCTURE.

Demonstrated by making transverse sections through the spinal cord at various levels, and in some instances requiring the aid of a hand lens.

a. Gray matter.

Central canal—58:40.

Central gray matter—58:41.

Anterior gray commissure—58:43.

Posterior commissure—58:44.

Gray columns—58:45.

Anterior column—48:46.

Lateral column—58:47.

Reticular formation—58:53.

Posterior column—58:48.

Neck of posterior column—58:49.

Apex of posterior column—58:50.
Gelatinous substance—58:51.

b. White matter.

Anterior white commissure—58:42.
Anterior funiculus—58:54.
Anterior cerebrospinal or pyramidal fasciculus—
58:55.
Lateral funiculus—59:2.
Lateral cerebrospinal or pyramidal fasciculus—59:3.
Cerebellospinal fasciculus—59:4.
Posterior funiculus—59:7.
Fasciculus gracilis—59:8.
Fasciculus cuneatus—59:9.

VI. Articulations of the Thorax

1. STERNOCOSTAL ARTICULATIONS—19:25.

Articular capsule—19:26.
Interarticular sternocostal ligament**—19:27.
Radiate sternocostal ligaments**—19:28.
Membrane of sternum**—19:29.
Costoxiphoid ligaments**—19:30.
Interchondral articulations—19:34.

2. SYNCHONDROSIS STERNALIS—7:49.

3. COSTOVERTEBRAL ARTICULATIONS—19:12.

a. Capitular articulations—19:13.

Articular capsules—19:14.
Radiate ligament of head of rib**—19:15.
Interarticular ligament of head of rib**—19:16.

b. Costotransverse articulations—19:17.

Articular capsules—19:18.
Ligament of neck of rib**—19:20.
Ligament of tubercle of the rib**—19:19.
Anterior costotransverse ligament**—19:21.
Posterior costotransverse ligament**—19:22.
Lumbocostal ligament—19:23.
Costotransverse foramen—19:24.

4. ARTICULATIONS OF THE VERTEBRAL COLUMN.

For the ligaments in relation to the vertebral arches, see Thorax, V:4.

Anterior longitudinal ligament—18:46.
Posterior longitudinal ligament—18:47.
Intervertebral fibrocartilages—18:37.

The following structures may be demonstrated by dividing the thorax at about the level of the fourth thoracic intervertebral disc, and making incisions through the disc:

Annulus fibrosus—18:38.
Nucleus pulposus—18:39.

HEAD AND NECK

PLATE 5

Anterior aspect of the head and neck showing surface anatomy and surface projection of the bones of the cranium and cervical vertebrae.

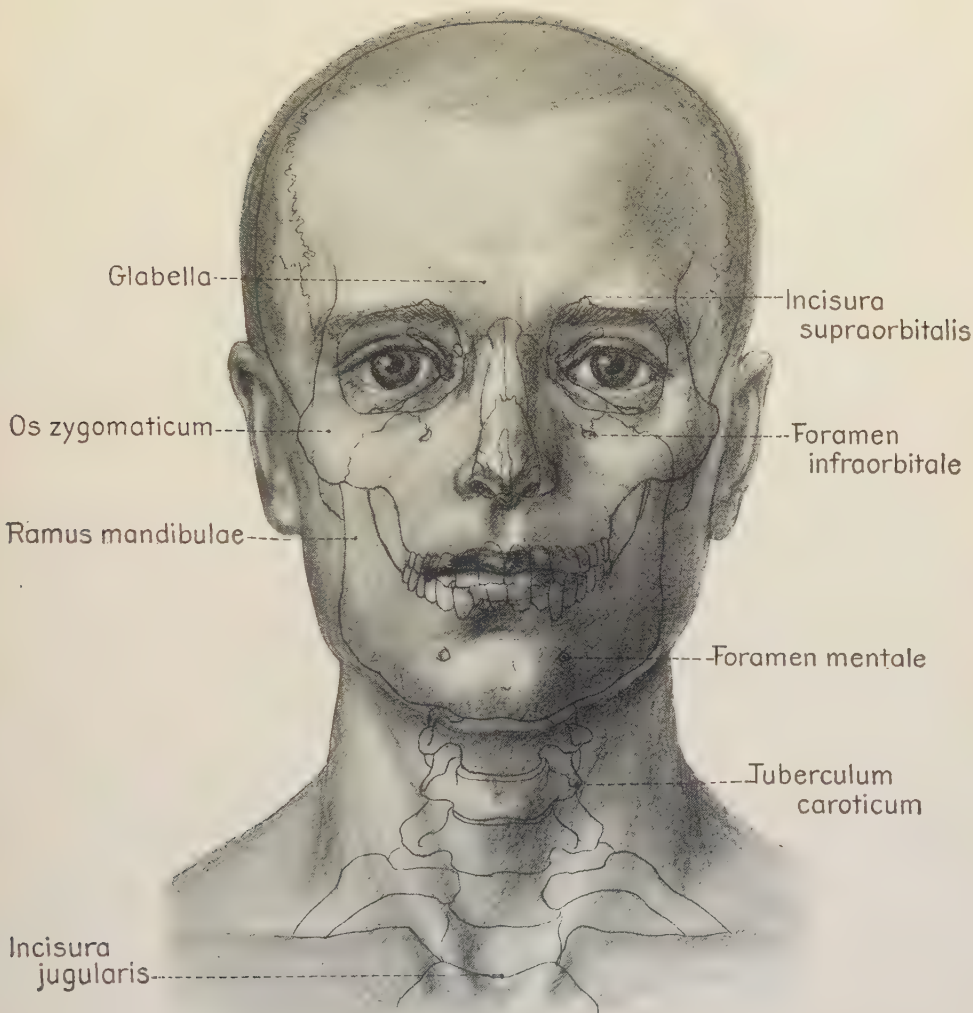
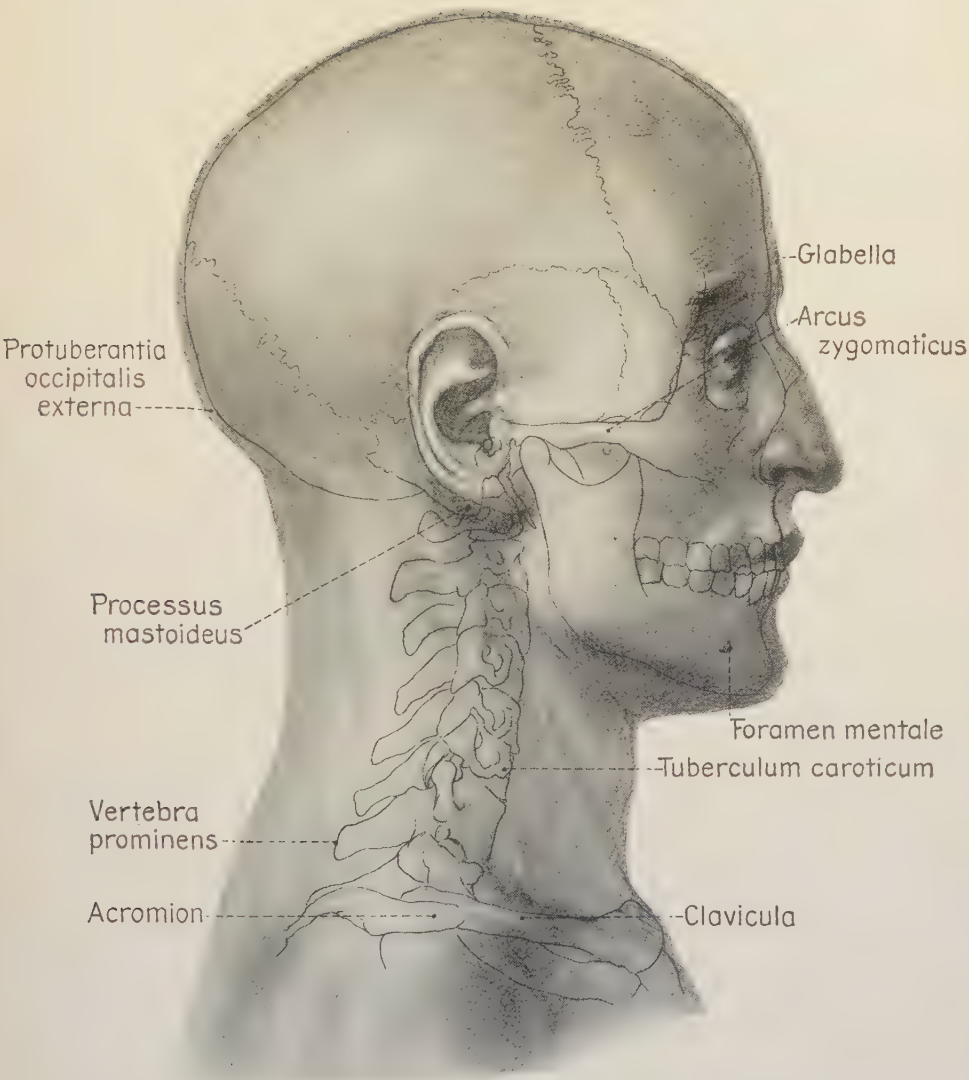


PLATE 6

Lateral aspect of the head and neck showing surface anatomy and surface projections of the bones of the cranium, cervical vertebrae, and girdle of the superior extremity.



HEAD AND NECK

I. Structures in Relation to the Scalp and Temporal Region

1. GENERAL CHARACTERISTICS OF CRANIUM.

a. Subdivisions of cranium.

Cranium—4: 7.

For bones of the cranium see 7: 65, 12: 14.

Vertex—4: 8.

Sinciput—4: 9.

Forehead—4: 10.

Occiput—4: 11.

Temples—4: 12.

Ear—4: 13.

Auricles—4: 14.

b. Regions of head—82: 1. (Fig. 1 and pls. 11, 12.)

Frontal region—82: 2.

Supraorbital region—82: 3.

Parietal region—82: 4.

Occipital region—82: 5.

Temporal region—82: 6.

Auricular region—82: 7.

Mastoid region—82: 8.

2. SCALP AND TEMPORAL REGIONS: SUPERFICIAL BLOOD VESSELS AND NERVES.

Incisions for skin reflection: (a) median longitudinal, from the glabella to the external occipital protuberance; (b) frontal, over the vertex from the right to the left mastoid processes; (c) from a point on the latter incision just above the ear, downward and slightly anteriorly to the root of the zygomatic arch.

a. Frontal region.

Supratrochlear nerve—66: 22.

Frontal ramus of frontal nerve—66: 21.

Supraorbital nerve—66: 20.

Frontal artery—48: 12.

Supraorbital artery—48: 5.

Angular vein—53: 71.

b. Temporal region.

Temporal branches of facial nerve—67: 58.

Auriculotemporal nerve—67: 16.

Zygomaticotemporal branch of zygomatic nerve**—66: 41.

Superficial temporal artery—47: 36.

Frontal ramus—47: 42.

Parietal ramus—47: 43.

Superficial temporal veins—54: 7.

*temporal branch of
zygomatic nerve*

c. Mastoid and occipital regions.

Posterior auricular nerve—67: 52.

Occipital ramus**—67: 53.

Posterior ramus of great auricular nerve**—69: 12.

Lesser occipital nerve—69: 10.

Great occipital nerve—69: 6.

Posterior auricular artery—47: 29.

Occipital artery—47: 22.

Posterior auricular vein**—54: 21.

Occipital vein**—54: 20.

Occipital lymph glands—56: 35.

Posterior auricular glands—56: 36.

Anterior auricular glands—56: 37.

3. SCALP: DEEPER STRUCTURES.

Epicranius muscle—24: 8.

Frontal muscle—24: 9.

Procerus muscle**—24: 11.

Occipitalis muscle—24: 10.

Auricularis anterior muscle**—24: 20.

Auricularis superior muscle**—24: 21.

Auricularis posterior muscle**—24: 22.

Galea aponeurotica—24: 42.

Pericranium—12: 16.

Exposed by dividing the galea aponeurotica by two incisions, about 4 cm. in length, intersecting each other at right angles at the vertex and reflecting the flaps, identifying at the same time the loose areolar connective tissue external to it.

Emissary veins.

4. AURICLE OR EXTERNAL EAR.

Lobule of the auricle—78: 33.

Tragus—78: 46.

Incisura intertragica—78: 49.

Incisura anterior—78: 48.

Concha of auricle—78: 43.

Cymba of concha**—78: 44.

Cavity of concha**—78: 45.

Helix—78: 35.

Crus helices**—78: 36.

Spina helices**—78: 37.

Cauda helices**—78: 38.

Anthelix—78: 39.

Crura anthelices**—78: 41.

Fossa triangularis**—78: 40.

(Tuberculum auriculæ)**—78: 50.

Fossa anthelix**—78: 59.

Eminentia conchæ**—78: 60.

Eminentia scaphæ**—78: 61.

Eminentia fossæ triangularis**—78: 62.

The muscles and ligaments of the external ear—78: 67-74—may be exposed by removing the skin from the auricle.

II. Intracranial Structures in Relation to the Brain and Cranial Wall

1. STRUCTURES EXPOSED BY THE REMOVAL OF THE CALVARIA.

The calvaria may be removed by: (a) making a median longitudinal incision through the galea aponeurotica and pericranium, extending from the glabella to the external occipital protuberance, and reflecting the two flaps laterally to the level of the temporal lines; (b) detaching the temporal muscle and temporal fascia from the bone and completing the reflection of the galea aponeurotica, pericranium, temporal fascia, and muscle downward to the level of the ears; (c) with a saw making a cut along the largest horizontal circumference of the cranium passing just superior to the glabella anteriorly and a little above the external occipital protuberance posteriorly, sawing through the outer table of the skull only; (d) with a mallet and chisel splitting the inner table of the bone along the line of the preceding cut, inserting a hook or other instrument into the cut in front and forcibly wrenching off the skull cap.

Dura mater of the brain—65: 33.

Middle meningeal artery—47: 50.

Arachnoideal granulations—65: 53.

The following structures may be exposed: (a) by making two sagittal incisions through the dura mater, one on each side of the superior sagittal sinus, along its entire length anteriorly and posteriorly; (b) from the middle of each of the preceding incisions, cutting lateralward through the dura mater down to the cut margins of the skull and reflecting the four flaps of the dura mater.

Subdural cave—65: 43.

Arachnoid of the brain—65: 45.

Pia mater of the brain—65: 77.

Venae cerebri—53: 41.

Superior sagittal sinus—53: 19.

Its interior may be exposed by an incision extending throughout its entire length.

Falx cerebri—65: 34.

2. STRUCTURES EXPOSED BY THE REMOVAL OF THE BRAIN.

a. Roots of cerebral nerves.

As preliminary to the removal of the brain⁴ the roots of the cerebral nerves may be exposed by: (a) detaching the falx cerebri from the crista galli and pulling it backward; (b) raising the frontal lobes of the brain from the floor of the cranium (facilitated by letting the head hang backward over a head block) and detaching the olfactory bulbs from the lamina cribrosa of the ethmoid bone and thus at the same time severing the olfactory nerves; (c) dividing (preferably with a scissors) the optic nerves, internal carotid arter-

⁴A second method for the removal of the brain which may be adopted at stage (d) in the above procedure is to displace the temporal lobes of the cerebrum, dividing the mid-brain, removing the cerebrum and studying the structures thus exposed within the base of the cranium. Next divide the tentorium along its attached border, study the exposed surface of the cerebellum and then proceed as in stages (e) and (f). The former method is the one usually adopted in an autopsy; the latter method is perhaps more instructive, although it does not leave the brain intact.

used

ies, infundibulum, oculomotor nerves and the trochlear nerves (the latter being found in relation to the free margin of the tentorium cerebelli); (d) exposing the tentorium of the middle cranial fossae and dividing it along its attachment to the superior angle of the temporal bone on each side; and (e) identifying and dividing in succession the following cerebral nerves:

- 5 Trigeminal nerve—66: 11.
- 6 Abducent nerve—67: 46.
- 7 Facial nerve—67: 47.
- 8 Acoustic nerve—67: 65.
- 9 Glossopharyngeal nerve—68: 8.
- 10 Vagus nerve—68: 22.
- 11 Accessory nerve—68: 57.
- 12 Hypoglossal nerve—68: 60.

(f) The detachment of the brain may then be completed by dividing the vertebral arteries and spinal cord just below the level of the foramen magnum and removing the organ.

b. *General structural characteristics of the exposed base of the cranium and related dura mater.*

The following structures may be identified by inspection:

- Anterior, middle, and posterior, cranial fossae—12: 29–31.
- Crista galli—10: 38.
- Small wing of the sphenoid bone—8: 41.
- Anterior clinoid process—8: 44.
- Ophthalmic artery—47: 70.
- Posterior clinoid process—8: 31.
- Diaphragm sellae—65: 37.
- Tentorium cerebelli—65: 35.
- Cisterna interpeduncularis—65: 51. — 61⁰
- Falx cerebellum—65: 36.
- Great cerebral veins—53: 48.
- Basal vein—53: 51.

The foramina transmitting the cerebral nerves may be demonstrated in a skeletal preparation of the skull.

c. *Sinuses of the dura mater*—53: 13.

In opening and demonstrating the following sinuses, the dura should be left *in situ* in the floor of the cranium.

- Transverse sinus—53: 14.
- Confluence of the sinuses—53: 15.
- Occipital sinus—53: 17.
- Superior sagittal sinus—53: 19.
- Inferior sagittal sinus—53: 20.
- Straight sinus—53: 21.
- Inferior petrosal sinus—53: 22.
- Superior petrosal sinus—53: 23.
- Cavernosus sinus—53: 24.

Its walls and contents should be left intact for later study (see X: 8).

- Anterior and posterior intercavernosus sinuses—53: 25–26.
- Circular sinus—53: 27.

Sphenoparietal sinus—53:28.

Basilar plexus—53:18.

Diploic veins—53:29-33.

Emissary veins—53:34-37.

d. Arteries.

The cut ends of the following arteries may be identified by inspection of the floor of the cranium and the base of the brain, and their osseous relations in the cranium demonstrated in a skeletal preparation of the skull.

Internal carotid artery—47:68.

Vertebral artery—48:21.

Middle meningeal artery—47:50.

e. Hypophysis—62:30.

May be isolated for study by detaching the diaphragma sellae and removing the hypophysis from the sella turcica.

Anterior and posterior lobes—62:31, 32.

The relations of its lobes may be further examined by dividing the hypophysis in the sagittal plane.

To retain the structures in the floor of the cranium for later study the cranial cavity may be filled with tow or gauze soaked with preservative fluid, the calvarium replaced and the scalp flaps stitched in position over it.

III. Structures in the Lateral and Anterior Regions of the Neck

1. SURFACE ANATOMY. (Pls. 5, 6.)

Hyoid bone—12:10.

Greater cornua—12:13.

Laryngeal prominence—36:19.

Thyroid cartilage—36:21.

Cricoid cartilage—36:35.

Trachea—37:41.

Carotid tubercle of the 6th cervical vertebra—6:42.

Jugular notch—7:54.

Clavicle—13:59.

Mandible—11:60. (Its inferior margin.)

Mastoid process—8:78.

Sternocleidomastoid muscle—24:55.

2. REGIONS OF THE NECK. (Fig. 1 and pls. 11, 12. May be outlined on the skin with pencil or crayon.)

Anterior regions of the neck—82:24.

Submental region—82:25.

Hyoid region—82:26.

Subhyoid region—82:27.

Laryngeal region—82:28.

Thyroid region—82:29.

Suprasternal region—82:30.

Jugular fossa—82:31.

Submaxillary region—82:32.

Carotid fossa—82:33.

- Sternocleidomastoid region—82:34.
- Lesser supraclavicular fossa—82:35.
- Lateral regions of the neck—82:36.
- Larger supraclavicular fossa—82:37.
- Omoclavicular triangle—82:38.
- Posterior regions of the neck—82:39.
- Nuchal region—82:40.

3. SUPERFICIAL FASCIA, PLATYSMA, VEINS, AND CUTANEOUS NERVES.

Incisions for skin reflection: (*a*) in the middle line from the chin to the manubrium; (*b*) from the middle of the superior margin of the manubrium obliquely upward and backward along the sternocleidomastoid muscle to the mastoid process; (*c*) from the middle of the superior margin of the manubrium laterally along the clavicle to the acromion.

Superficial fascia—23:36.

Platysma muscle—24:54.

The following structures may be exposed by reflecting the platysma upward, confining the dissection only to the superficial region of the neck and thus guarding against disturbance of the deeper structures listed in the following sections.

External jugular vein—54:19.

Posterior auricular vein—54:21.

Anterior jugular vein—54:22.

Superficial cervical lymph glands—56:41.

Lesser occipital nerve—69:10.

Great auricular nerve—69:11.

Cutaneous nerve of the neck—69:14.

Superior rami**—69:15.

Inferior rami**—69:16.

Supraclavicular nerves—69:17.

Anterior supraclavicular nerves**—69:18.

Middle supraclavicular nerves**—69:19.

Posterior supraclavicular nerves**—69:20.

Cervical branch of the facial nerve—67:62.

4. CERVICAL FASCIA AND STERNOCLEIDOMASTOID MUSCLE.

Cervical fascia—24:70.

The various subdivisions and certain deeper relations of the fascia can as yet not be completely exposed. In the region of the sternum the superficial or investing layer of the cervical fascia divides into two layers and encloses a suprasternal space (sometimes called the space of Burns) which may be exposed by making a transverse incision through the fascia immediately above the sternum and a second incision about 2 cm. in length along the anterior border of each sternocleidomastoid muscle, reflecting the fascial flap upwards and demonstrating the areolar tissue, content of the space and the lower parts of the anterior jugular veins and their anastomoses.

Sternocleidomastoid muscle—24:55.

5. POSTERIOR TRIANGLE OF THE NECK.

The following contents of the posterior triangle of the neck may be exposed by carefully removing the cervical fascia, noting its relations to the omohyoid muscle and the chain of deep cervical lymph glands

along the posterior margin of the sternocleidomastoid muscle and confining the dissection to the triangle and its two subdivisions. All nerves and vessels must be carefully noted and guarded during the progress of the dissection of this complex region.

a. Occipital triangle.

- Occipital artery—47: 22.
- Transverse cervical artery—48: 67.
- Occipital vein—54: 20.
- Transverse cervical veins**—54: 28.
- Supraclavicular nerves—69: 17-20.
- Accessory nerve—68: 57.
- Muscular rami of the cervical nerves to the trapezius and levator scapulae muscles.
- Superior deep cervical lymph glands—56: 42.

b. Supraclavicular triangle.

This triangle has also been designated the subclavius triangle. Cf. omoclavicular trigone—82: 38.

- Inferior belly of the omohyoid muscle—24: 57.
- Prevertebral fascia—24: 71.

The following structures are exposed by removing the prevertebral fascia.

- Transverse cervical artery—48: 67.
- Transverse scapular artery—48: 60.
- Slightly inferior to the level of the triangle, strictly speaking.
- Subclavian artery—48: 20. (Its third part.)
- External jugular vein—54: 19.
- Anterior jugular vein—54: 22.
- Transverse cervical veins—54: 28.
- Transverse scapular vein—54: 25.
- Subclavian vein—54: 26.
- Slightly inferior to the level of the triangle, strictly speaking.
- Inferior deep cervical lymph glands—56: 43.

c. Supraclavicular part of the brachial plexus—69: 25.

- Posterior thoracic nerves—69: 26.
- Dorsal scapular nerve—69: 27.
- Long thoracic nerve—69: 28.
- Anterior thoracic nerves—69: 29.
- Subclavian nerve**—69: 30.
- Suprascapular nerve—69: 31.
- Thoracodorsal nerve—69: 33.
- Axillary nerve—69: 34.

d. Muscles in floor of posterior triangle.

- Splenius capitis muscle—23: 24.
- Levator scapulae muscle—23: 20.
- Scalenus medius muscle—24: 67.
- Scalenus posterior muscle—24: 68.

6. ANTERIOR TRIANGLE.

The following structures should be dissected with reference to both their continuity throughout the anterior triangle as a whole as well as their relations to its three subdivisions (the submaxillary, carotid, and muscular triangles), removing at the same time the cervical fascia but guarding against injury to nerves.

a. Submaxillary or digastric triangle.

The following structures should be identified with very little if any dissection:

Submaxillary lymph glands—56:38.

Submaxillary gland—31:11.

External maxillary artery—47:13.

Submental artery**—47:16.

Mylohyoid ramus of the internal maxillary artery**—47:48.

Anterior facial vein—53:70.

Lingual vein**—53:6.

Hypoglossal nerve—68:60.

Mylohyoid nerve—67:32.

Mylohyoid muscle—24:51.

Hyoglossus muscle—32:3.

By making a short vertical slit in the hyoglossus muscle between the hypoglossal nerve and the tendon of the digastric muscle, the lingual artery may be exposed at a point where it may be ligated.

b. Carotid triangle.

Hypoglossal nerve—68:60.

Guard against injury to the submaxillary gland, adjacent vessels, the superior laryngeal nerve, and its rami.

Descending ramus—68:61.

Ansa hypoglossi—68:62.

Thyreohyoid ramus—68:63.

Common carotid artery—46:59.

In determining the relations of the carotid artery to the carotid sheath of the cervical fascia it will be observed that throughout the greater part of their course the structures within the carotid sheath together with the cervical part of the sympathetic nerve trunk are strictly speaking internal to the sternocleidomastoid muscle rather than within the carotid triangle, and that their exposure consequently involves a lateral retraction of this muscle.

External carotid artery—46:60.

Superior thyroid artery—46:61.

Hyoid ramus—46:62.

Sternocleidomastoid ramus—46:63.

Superior laryngeal artery—46:64.

Lingual artery—47:8.

External maxillary artery—47:13.

Sternocleidomastoid artery—47:21.

Occipital artery—47:22.

- Ascending pharyngeal artery—47: 4.
- Internal carotid artery—47: 68.
- Internal jugular vein—52: 69.
 - Lingual vein—53: 6.
 - (Superior thyreoid veins)—53: 10.
- Common facial vein—53: 69.
 - Anterior facial vein—53: 70.
 - Posterior facial vein—54: 6.
- Accessory nerve—68: 57. (Its external ramus—68: 59.)
- Vagus nerve—68: 22.
 - Superior laryngeal nerve—68: 30.
 - External ramus—68: 31.
 - Internal ramus—68: 32.
- Cervical part of the sympathetic trunk—71: 34.
 - Superior cervical ganglion—71: 35.
 - External carotid nerves—71: 45.
 - External carotid plexus—71: 46.
- Superior deep cervical lymph glands—56: 42.
- Larynx—36: 18. (Identified without dissection.)
- Pharynx—32: 29. (Identified without dissection.)
- Glomus caroticum—38: 30.

c. Muscular triangle.

- Sternohyoid muscle—24: 56.
- Sternothyreoid muscle—24: 60.
- Nerves to the sternothyreoid and sternohyoid muscles.
- External ramus of the superior laryngeal nerve—68: 31.
- Inferior laryngeal nerve—68: 40.
- The following structures should be identified without dissection:
 - Larynx—36: 18.
 - Trachea—37: 41.
 - Thyreoid gland—38: 22.
 - Oesophagus—32: 66.

7. STRUCTURES IN RELATION TO THE ANTERIOR MEDIAN LINE OF THE NECK.

The relations of the following structures should be observed with very little, if any, dissection:

a. Suprahyoid region.

- Platysma muscle—24: 54. (Already exposed, III: 3.)
- Superficial fascia—23: 36.
- Anterior bellies of the digastric muscles—24: 48.

The submental triangle and its contents are situated between them.

- Mylohyoid muscles—24: 51. (Separated by a raphe.)

b. Infrahyoid region.

- Hyothyreoid membrane—36: 34.
- Thyreoid cartilage—36: 21.
- Cricothyreoid ligament—36: 45.

Cricoid cartilage—36:35.
 Cricothyroid muscles—36:78.
 Trachea—37:41.
 Isthmus of thyroid gland—38:23.
 (Pyramidal lobe of thyroid gland)—38:24.
 Inferior thyroid veins—52:52.

8. MUSCLES OF THE NECK: SECOND AND THIRD LAYERS.

Digastric muscle—24:47.
 Stylohyoid muscle—24:50.
 Omohyoid muscle—24:57.
 Sternohyoid muscle—24:56.
 Sternothyroid muscle—24:60.
 Thyreohyoid muscle—24:61.

9. STERNOCLAVICULAR ARTICULATION—19:52.

May be exposed by dividing the sternal and clavicular heads of the sternocleidomastoid muscle and reflecting the muscle toward its insertion.

Sternoclavicular ligament—19:55.
 Interclavicular ligament—19:57.
 Costoclavicular ligament—19:56.
 Articular capsule—19:53.
 Articular disc—19:54.

10. ROOT OF THE NECK.

a. Muscles.

The exposure of the scalene muscles should not be completed until the following nerves and vessels have been demonstrated.

Anterior scalene muscle—24:66.
 Middle scalene muscle—24:67.
 Posterior scalene muscle—24:68.

b. Blood vessels and lymphatics.

Many of the following structures have already been partly exposed in preceding dissections and are here re-listed with more especial reference to their relations to the root of the neck.

Subclavian artery—48:20.

In demonstrating the following blood vessels care should be taken to guard against injury to the cervical nerves and sympathetic trunk listed under subhead c.

Vertebral artery—48:21.

Internal mammary artery—48:34.

Thyreocervical trunk—48:48.

Inferior thyroid artery—48:49.

Ascending cervical artery—48:55.

Superficial cervical artery—48:59.

Transverse scapular artery—48:60.

Costocervical trunk—48:62.

Highest intercostal artery—48:63.

Deep cervical artery—48:66.

Transverse cervical artery—48:67.

Right and left innominate veins—52:51.

Inferior thyreoid veins—52: 52.
 Inferior laryngeal vein**—52: 55.
 Lowest thyreoid vein—52: 53.
 Unpaired thyreoid plexus**—52: 54.
 Vertebral vein—52: 63.

Deep cervical vein**—52: 64.
 Internal jugular vein—52: 69.
 Inferior bulb of the jugular vein—52: 70.
 Subclavian vein—54: 26.
 Thoracoacromial vein—54: 27.
 Transverse cervical veins—54: 28.
 Thoracic duct—56: 25.
 Right lymphatic duct—56: 24.

c. Nerves.

Phrenic nerve—69: 21. — 71: 20
 Vagus nerve—68: 22.
 Cervical sympathetic trunk—71: 34. (Its inferior part.)
 Middle cervical ganglion—71: 60.
 Inferior cervical ganglion—71: 62.
 Superior cardiac nerve—71: 59.
 Middle cardiac nerve—71: 61.
 Inferior cardiac nerve—71: 64.
 Ansa subclavia—71: 63.

d. Remaining structures at the root of the neck.

Structures identified without dissection.
 Summit of pleura—38: 5.
 Trachea—37: 41.
 Oesophagus—32: 66.

11. CERVICAL PLEXUS AND VISCERA OF THE NECK.

Cervical plexus—69: 9.
 The following organs should be left *in situ* for later reference:
 Thyreoid gland—38: 22.
 Isthmus—38: 23.
 (Pyramidal lobe)—38: 24.
 Right and left lobes—38: 25.
 (Accessory thyreoid glands)—38: 28. (Also designated para-thyreoid glands.)
 Trachea—37: 41.
 Tracheal cartilages—37: 42.
 Membranous wall—37: 44.
 Cervical part of oesophagus—32: 67.

IV. Back of the Head and Neck

1. REGIONS OF THE BACK OF THE HEAD AND NECK. (Pl. 12.)

Parietal region—82: 4.
 Occipital region—82: 5.
 Posterior region of the neck—82: 39.

Nuchal region—82:40.

Fovea nuchae—83:1.

2. FASCIA, SUPERFICIAL NERVES AND VESSELS.

Incisions for skin reflection: (a) from the external occipital protuberance to the spine of the vertebra prominens; (b) from the spine of the vertebra prominens laterally on each side to the medial border of the acromion; (c) from the external occipital protuberance laterally on each side for about 6 cm.

Superficial fascia—23:36.

Great occipital nerve—69:6.

Small occipital nerve—69:10.

Occipital vein—54:20.

(Third occipital nerve)—69:7.

Posterior rami of cervical nerves IV–VIII**—69:2.

Posterior ramus of great auricular nerve**—69:12.

For the relation of the first cervical nerve and vertebral artery to the suboccipital space see end of following section.

3. MUSCLES IN RELATION TO THE BACK OF THE NECK.

Trapezius muscle—23:15. (Its cervical part only.)

Levator scapulae muscle—23:20.

May be exposed by dividing the trapezius muscle at its origin from the superior nuchal line and external occipital protuberance, and cutting through the muscle about 1 cm. from the cervical vertebral spines and reflecting the cervical part of the muscle laterally, guarding against injury to underlying structures.

The following structures are either internal to the levator scapulae muscle or in relation to the superior margin of the scapula.

Descending ramus of the transverse cervical artery—48:69.

Dorsal scapular nerve—69:27.

Inferior belly of omohyoid muscle—24:59.

Transverse scapular artery—48:60.

Suprascapular nerve—69:31.

Rhomboideus minor muscle—23:19. (Its origin only.)

In demonstrating the following structures the rhomboideus minor muscle should be detached at its origin and reflected laterally.

Fascia nuchae—24:6.

Ligamentum nuchae—18:45.

Serratus posterior superior muscle—23:22.

In demonstrating the following two muscles, the serratus posterior superior muscle should be detached at its origin and reflected laterally.

Splenius capitis muscle**—23:24.

Splenius cervicis muscle**—23:23.

The following muscles are exposed by dividing the attachments of the splenius capitis and splenius cervicis muscles close to the spines of the vertebrae and reflecting the muscles.

Iliocostalis cervicis muscle**—23:29.

Longissimus capitis muscle**—23:44.

Spinalis cervicis muscle**—23:47.

Spinalis capitis muscle**—23:48.

In demonstrating the following two muscles the longissimus capitis should be detached at its origin and reflected toward its insertion.

Semispinalis cervicis muscle**—23 : 51.

Semispinalis capitis muscle**—23 : 52.

Multifidus muscle**—23 : 53.

May be exposed by detaching the semispinalis capitis muscle from the transverse processes of the cervical vertebrae and reflecting the muscle toward its insertion. Guard the vessels and nerves internal to the muscle.

Rotatores muscles**—23 : 54.

May be exposed by removing the multifidus muscle.

Rotatores longi muscles**—23 : 55.

Rotatores breves muscles**—23 : 56.

Interspinales muscles**—23 : 57.

Rectus capitis posterior major muscle—23 : 64.

Rectus capitis posterior minor muscle—24 : 1.

Obliquus capitis superior muscle—24 : 3.

Obliquus capitis inferior muscle—24 : 4.

The following structures are in relation to the suboccipital space or triangle formed by rectus capitis posterior major and the oblique capitis superior and inferior muscles.

Suboccipital nerve—69 : 5. (Its posterior ramus.)

Vertebral artery—48 : 21. (Its third part only.)

Posterior arch of atlas—6 : 59.

4. DEEPER BLOOD VESSELS AND NERVES OF THE BACK OF THE NECK.

For the more superficial vessels and nerves see I : 2c.

Occipital artery—47 : 22.

Muscular rami**—47 : 25.

Ramus descendens**—47 : 26.

Mastoid ramus**—47 : 23.

Auricular ramus**—47 : 24.

Occipital rami**—47 : 28.

Ascending cervical artery—48 : 55.

Deep cervical artery—48 : 66.

Occipital vein—54 : 20.

Mastoid emissary vein—53 : 35.

Deep cervical vein—52 : 64.

Posterior rami of cervical nerves—69 : 2.

Medial rami—69 : 3.

Lateral rami—69 : 4.

V. Face and Frontal Region of the Head

1. SURFACE ANATOMY. (Pls. 5, 6.)

Glabella—10 : 21.

Supraorbital margin of frontal bone—10 : 9.

Infraorbital margin of maxillary bone—10 : 74.

Zygomatic arch—12 : 40.

Temporal fossa—12 : 39.

Ramus of the mandible—11 : 72.

- Body of the mandible—11: 61.
- Fossa retromandibularis—82: 22.
- Nose—4: 23.
 - Dorsum—4: 24.
 - Apex—4: 25.
 - Ala—4: 26.
 - Septum—35: 39.
 - Nares—35: 37.
- Mouth—4: 27.
 - Superior and inferior lips—4: 30, 31.
 - Rima oris—4: 32.
 - Angle of the mouth—30: 38.
 - Nasolabial sulcus—4: 28.
 - Cheek—4: 36.
 - Chin—4: 38.
 - Mentolabial sulcus—4: 37.
- Eye—4: 16.
 - Superior and inferior eyelids—4: 17, 18; 75: 12, 13.
 - Rima palpebrarum—4: 19, 75: 16.
 - Medial and lateral palpebral commissures—75: 17, 18.
- Angulus oculi medialis and lateralis—7: 19, 20.
- Bulbus oculi—4: 20.
- Infrapalpebral sulcus—4: 22.
- Supercilium—4: 21.
- Anterior and posterior palpebral surfaces—75: 14, 15.
- Anterior and posterior palpebral margins—75: 21, 22.
- Tarsal glands—75: 27. (Their openings only.)
 - Sebum palpebrale—75: 28.
- Tunica conjunctive palpebrarum—75: 35.
- Tunica conjunctive oculi—75: 34.
- Fornix conjunctive superior and inferior—75: 36, 37.
- Lacus lacrimalis—75: 47.
- Caruncula lacrimalis—75: 33.
- Plica semilunares conjunctivae—75: 32.
- Papilla lacrimalis—75: 50.
- Puncta lacrimalia—75: 48.
- Ductus lacrimales—75: 49.

2. REGIONS OF THE FACE—82: 9-21. (Fig. 1 and pl. 11.)

- Nasal region—82: 10.
- Oral region—82: 11.
- Superior and inferior labial regions—82: 12, 13.
- Mental region—82: 14.
- Orbital region—82: 15.
- Superior and inferior palpebral regions—82: 16, 17.
- Infraorbital region—82: 18.
- Buccal region—82: 19.
- Zygomatic region—82: 20.
- Parotideomasseteric region—82: 21.
- Retromandibular fossa—82: 22.

3. FASCIA AND PAROTID GLAND.

Incisions for skin reflection: (a) median longitudinal from the forehead to the tip of the chin; (b) from the anterior median line transversely at the level of the rima palpebrarum, encircling the eye, and extending posteriorly to the ear; (c) transversely from the angle of the mouth to the posterior border of the ramus of the mandible.

Parotid gland—31:13.

May be exposed by removing the parotideomasseteric fascia, but guarding all nerves from injury.

Retromandibular process—31:14.

Accessory parotid gland—31:15.

Parotid duct—31:16.

4. SUPERFICIAL NERVES OF THE FACE.

Anterior ramus of the great auricular nerve**—69:13.

BRANCHES OF THE FACIAL NERVE:

Exposed by carefully removing the parotid gland, a part at a time. The exit of the facial nerve from the stylomastoid foramen may be exposed by cutting away (with saw and chisel) the free projecting part of the mastoid process, guarding against injury to the posterior auricular nerve.

Parotid plexus—67:57.

Temporal rami—67:58.

Zygomatic rami—67:59.

Buccal rami—67:60.

Marginal mandibular ramus—67:61.

Digastric ramus—67:54.

Stylohyoid ramus—67:55.

BRANCHES OF THE OPHTHALMIC DIVISION OF THE TRIGEMINAL NERVE:

Supraorbital nerve—66:20.

Frontal ramus—66:21. (Of the frontal nerve.)

Supratrochlear nerve—66:22.

Anterior nasal rami of the nasociliary nerve**—66:28.

Superior and inferior palpebral rami of the infratrochlear nerve**—66:34, 35.

BRANCHES OF THE MAXILLARY DIVISION OF THE TRIGEMINAL NERVE:

Zygomaticotemporal ramus of the zygomatic nerve**—66:41.

Zygomaticofacial ramus of the zygomatic nerve**—66:42.

Inferior palpebral rami of the infraorbital nerve**—66:52.

External nasal rami of the infraorbital nerve**—66:53.

Superior labial rami of the infraorbital nerve**—66:55.

BRANCHES OF THE MANDIBULAR DIVISION OF THE TRIGEMINAL NERVE:

Buccinator nerve—67:13.

May be identified at this stage of the dissection through its anastomoses with the facial nerve.

Auriculotemporal nerve—67:16.

Mental nerve—67:33.

5. SUPERFICIAL BLOOD VESSELS OF THE FACE.

BRANCHES OF THE EXTERNAL CAROTID ARTERY:

Superficial temporal artery—47: 36.

Parotid rami—47: 37.

Transverse artery of face—47: 38.

Anterior auricular rami—47: 39.

Zygomaticoorbital artery—47: 40.

Middle temporal artery—47: 41.

Internal maxillary artery—47: 44. (Its origin only.)

External maxillary artery—47: 13.

Inferior labial artery—47: 18.

Superior labial artery—47: 19.

Angular artery—47: 20.

Posterior facial vein and its tributaries**—54: 6-9, 13, 14.

Anterior facial vein and its tributaries**—53: 70-77, 54: 1-5.

6. MUSCLES OF THE FACE AND FRONT OF HEAD.

Platysma muscle—24: 54.

Frontalis muscle—24: 9.

Procerus muscle**—24: 11.

Orbicularis oculi muscle—24: 16.

Pars palpebralis**—24: 17.

Pars orbitalis**—24: 18.

Pars lacrimalis**—24: 19.

Nasalis muscle—24: 12.

Pars transversa**—24: 13.

Pars alaris**—24: 14.

Depressor septi nasi muscle**—24: 15.

Orbicularis oris muscle—24: 23.

Quadratus labii superioris muscle**—24: 28.

Caput zygomaticum**—24: 29.

Caput infraorbitale**—24: 30.

Caput angulare**—24: 31.

Zygomatic muscle**—24: 27.

Risorius muscle**—24: 26.

Triangularis muscle**—24: 24.

Quadratus labii inferioris muscle**—24: 32.

Caninus muscle**—24: 33.

Buccinator muscle—24: 34.

Buccopharyngeal fascia**—24: 43.

Incisivi labii superioris and inferioris muscles**—24: 35, 36.

VI. Structures in Relation to the Temporal
and Infratemporal Fossae

1. FASCIA, MUSCLES, AND VESSELS.

Temporal fascia—24: 45.

Zygomatic and temporal rami of the facial nerve—67: 59, 58.

Zygomaticofacial and zygomaticotemporal rami of the zygomatic
nerve**—66: 42, 41.

Middle temporal artery—47: 41.

Masseter muscle—24: 38.

The following nerve and artery may be exposed as they pass through the mandibular notch by detaching the temporal fascia from the zygomatic arch, with a saw and bone forceps dividing the zygomatic arch immediately anterior and posterior to the origin of the masseter muscle (the anterior saw-cut being made obliquely downward and anteriorly connecting the anterior ends of the superior and inferior margins of the arch), and carefully reflecting the detached segment of the zygomatic arch and masseter muscle (the dissection may be complicated by a union of the masseter and temporal muscles).

Masseter nerve—67: 9.

Masseteric artery—47: 54.

Temporal muscle—24: 39.

Exposed by dividing the masseteric nerve and artery and completing the reflection of the masseter muscle toward its insertion.

The deeper structures of the temporal fossa are demonstrated by removing the coronoid process of the mandible by a cut extending from the middle of the incisura mandibulae downward and anteriorly to the junction of the anterior margins of the coronoid process and ramus of the mandible (making the incision partially with a saw and completing the division with a bone forceps), reflecting the coronoid process and the attached temporal muscle upward (guarding at the same time against cutting the buccinator nerve), and with the handle of a scalpel detaching the deeper portion of the temporal muscle at its origin.

Anterior and posterior deep temporal nerves—67: 11, 12.

Anterior and posterior deep temporal arteries**—47: 56, 55.

Median temporal artery—47: 41.

Zygomaticotemporal branch of the zygomatic nerve**—66: 41.

The following structures in the infratemporal fossa may be more fully exposed by removing a segment of the ramus of the mandible. To this end two incisions may be made, one through the neck of the condyloid process of the mandible and a second transversely through the ramus of the mandible immediately superior to the level of the mandibular foramen (locating the level of the foramen by inserting the handle of a scalpel between the ramus and the subjacent structures and carrying it downwards until its progress is arrested by the vessels and nerves entering the foramen). In the case of both incisions the cut should be made through the lateral table of the bone with a saw and the incision completed with a bone forceps; the isolated segment of the mandibular ramus is removed and the subjacent nerves, vessels and muscles exposed.

External pterygoid muscle—24: 40.

Internal pterygoid muscle—24: 41.

Buccinator muscle—24: 34.

Buccopharyngeal fascia—24: 43.

Pterygomandibular raphe—32: 52.

Internal maxillary artery—47: 44. (Its first and second parts.)

Deep auricular artery**—47: 45. (Its origin only.)

Anterior tympanic artery**—47: 46. (Its origin only.)

Inferior alveolar artery—47: 47.

Mylohyoid ramus—47: 48.

Middle meningeal artery—47: 50.

(Accessory meningeal ramus)—47: 51.

Masseteric artery—47: 54.

Posterior and anterior deep temporal arteries—47: 55, 56.

Pterygoid rami**—47: 57.

Buccinator artery**—47: 58.

Posterior superior alveolar artery—47: 59.

The following tributaries of the posterior fascial vein are seldom well enough preserved to be satisfactorily demonstrated by dissection:

Articular mandibular veins**—54: 10.

Stylomastoid vein**—54: 12.

Pterygoid plexus—54: 15.

Transverse facial vein**—54: 13.

2. MANDIBULAR ARTICULATION—19: 35.

Articular capsule—19: 36.

Temporomandibular ligament—19: 38.

Sphenomandibular ligament—19: 39.

Stylomandibular ligament—19: 40.

Articular disc—19: 37.

Exposed by removing the temporomandibular ligament.

3. NERVES.

The demonstration of the following nerves may be completed by disarticulating the condyloid process and reflecting it together with the external pterygoid muscle anteriorly, guarding at the same time against cutting the auriculotemporal nerve.

Mandibular nerve—67: 6.

Spinosus nerve**—67: 7.

Masticator nerve—67: 9.

Masseteric nerve—67: 8.

Anterior and posterior deep temporal nerves—67: 11, 12.

Buccinator nerve—67: 13.

External pterygoid nerve—67: 14.

Internal pterygoid nerve—67: 15.

Auriculotemporal nerve—67: 16.

Nerve of the external auditory meatus**—67: 17.

Ramus to the tympanic membrane**—67: 8.

Lingual nerve—67: 23.

Inferior alveolar nerve—67: 28.

Mylohyoid nerve—67: 32.

Chorda tympani—67: 64.

4. MANDIBULAR CANAL—12: 3.

May be exposed by removing (by means of a saw, chisel, and bone forceps) the outer compact layer of the mandible.

Inferior alveolar artery—47: 47.

Mylohyoid ramus—47: 48.

Mental artery—47: 49.

Inferior alveolar nerve—67: 28.

Inferior dental plexus—67: 29.

Inferior dental rami—67: 30.

- Inferior gingival rami—67: 31.
- Mylohyoid nerve—67: 32.
- Mental nerve—67: 33.
- Mental rami**—67: 34.
- Inferior labial rami**—67: 35.

VII. Submaxillary Region

1. SUPERFICIAL STRUCTURES IN THE SUBMAXILLARY REGION.

With the exception of the following structures the more superficial structures in this region have already been listed in connection with the submaxillary or digastric triangle, III: 6a.

- Digastric muscle—24: 47-49.
- Stylohyoid muscle—24: 50.
- Submaxillary gland—31: 11. (Its superficial part only.)

2. DEEPER STRUCTURES IN THE SUBMAXILLARY REGION.

- Mylohyoid muscle—24: 51.

Exposed by dividing the anterior belly of the digastric muscle near its attachment to the mandible, sawing through the mandible slightly lateral to the median plane on each side (so as to leave intact the attachments of the geniohyoid and genioglossus muscles), and everting the inferior border of the lateral part of the mandible.

- Lingual nerve—67: 23.

May be exposed by dividing the mylohyoid muscle slightly below its origin from the mylohyoid line of the mandible and along the median raphe, and reflecting the muscle downward over the hyoid bone, guarding at the same time against cutting the mucous membrane of the mouth.

- Sublingual nerve**—67: 26.
- Lingual rami**—67: 27.
- Hypoglossal nerve—68: 60.
- Lingual rami**—68: 64.
- Submaxillary ganglion—67: 43.
- Rami communicating with the lingual nerve**—67: 44.
- Submaxillary rami**—67: 45.
- Glossopharyngeal nerve—68: 8.
- Submaxillary gland—31: 11. (Its deep part.)
- Submaxillary duct—31: 12.
- Sublingual gland—31: 8.
- Major and minor sublingual ducts**—31: 9, 10.
- Hyoglossus muscle—32: 3.
- Styloglossus muscle—32: 5.
- Chondroglossus muscle**—32: 4.
- Genioglossus muscle—32: 2.
- Geniohyoid muscle—24: 52.
- Lingual artery—47: 8.
- Exposed by detaching the hyoglossus muscle from the hyoid bone and reflecting it upward.
- Dorsal rami of the tongue**—47: 11.
- Sublingual artery**—47: 10.

Deep artery of the tongue**—47:12.
 Lingual vein—53:6.
 Stylohyoid ligament—18:54.

VIII. Structures in Relation to the Deeper Regions of the Neck and Base of the Cranium

1. OTIC GANGLION, TENSOR VELI PALATINI, STYLOPHARYNGEUS MUSCLES.

Otic ganglion—67:36.

Exposed by dividing the lingual and inferior alveolar nerves immediately inferior to their origins and carefully displacing the mandibular nerve.

ROOTS:

A short root from the mandibular nerve.**
 A long root, the lesser superficial petrosal nerve**—67:37.
 A sympathetic root from the plexus of the middle meningeal artery.**

BRANCHES OF DISTRIBUTION:

Tensor veli palatini nerve**—67:38.
 Tensor tympani nerve**—67:39.

COMMUNICATING RAMI:

Anastomotic ramus with the spinous nerve**—67:40.
 Anastomotic ramus with the auriculotemporal nerve**—67:41.
 Anastomotic ramus with the chorda tympani**—67:42.

Tensor veli palatini muscle—32:25.

May be exposed by detaching the internal pterygoid muscle from the posterior border of the lateral lamina of the pterygoid process—8:61.

Stylopharyngeus muscle—32:43.

May be exposed by dividing the posterior belly of the digastric muscle near its origin and reflecting it toward its attachment to the hyoid bone, cutting through the external carotid artery just inferior to its termination, dividing the posterior auricular and occipital arteries at their origins and displacing the external carotid artery anteriorly (guarding against injury to the glossopharyngeal nerve).

2. BLOOD VESSELS.

Internal carotid artery—47:68.

In completing its exposure the base of the styloid process may be divided (with a bone forceps) and the styloid process together with the attached muscles reflected downward and anteriorly. The correlation of the structures at the base of the cranium with the structures previously exposed in the floor of the cranium may be facilitated by removing the calvarium (guarding, however, against drying of the cranial floor).

In demonstrating the superior portion of the cervical part of the internal carotid artery, the pharyngeal rami of the vagus nerve should first be secured and the following four nerves identified in the interval between the internal carotid artery and the internal jugular vein, namely, the glossopharyngeal, vagus, accessory and hypoglossal nerves.

- Ascending pharyngeal artery**—47: 4.
- Ascending palatine artery**—47: 14.
- Tonsillar ramus of the external maxillary artery**—47: 15.
- Internal jugular vein—52: 69.
 - Superior bulb of the jugular vein—52: 70.
 - Lingual vein—53: 6.
 - (Superior thyreoid veins)—53: 10.
 - Common facial vein—53: 69.
- By slitting open the inferior part of the internal jugular vein the valve situated near the termination of the vein may be demonstrated.

3. NERVES.

- Glossopharyngeal nerve—68: 8.
 - Lingual rami**—68: 21. (Their origin only.)
 - Tonsillar rami**—68: 20.
 - Stylopharyngeal ramus**—68: 19.
 - Pharyngeal rami**—68: 18.
 - Superior ganglion—68: 9.
 - Petrous ganglion—68: 10.
 - Tympanic nerve—68: 11.
 - The following nerve, in the middle cranial fossa, is in relationship with the tympanic nerve:
 - Lesser superficial petrosal nerve—67: 37.
- Vagus nerve—68: 22.
 - Ganglion jugulare—68: 23.
 - Ganglion nodosum—68: 24.
 - The following rami cannot be satisfactorily demonstrated in an ordinary dissection.
 - Meningeal ramus**—68: 25.
 - Auricular ramus**—68: 26.
 - Anastomotic ramus with the glossopharyngeal nerve**—68: 27.
 - In review the following rami may be noted:
 - Pharyngeal rami—68: 28.
 - Superior laryngeal nerve and its rami—68: 30-33.
 - Superior cardiac rami—68: 34.
 - (Depressor nerve)—68: 35.
 - Recurrent nerve—68: 36.
- Accessory nerve—68: 57.
 - Internal ramus**—68: 58.
 - External ramus—68: 59.
- Hypoglossal nerve—68: 60.
 - The demonstration of its exit from the hypoglossal canal is facilitated by dividing the internal jugular vein 5 cm. below the base of the skull and reflecting it upward.
 - The following rami have already been exposed in preceding dissections:
 - Ramus descendens—68: 61.
 - Ansa hypoglossi—68: 62.

Thyreohyoid ramus—68 : 63.
Lingual rami—68 : 64.

4. SYMPATHETIC TRUNK.

Cervical part of the sympathetic trunk—71 : 34.

Superior cervical ganglion—71 : 35.

Jugular nerve**—71 : 36.

Internal carotid nerve**—71 : 37.

Internal carotid plexus**—71 : 38.

External carotid nerves**—71 : 45.

External carotid plexus**—71 : 46.

Laryngopharyngeal rami**—71 : 57.

Superior cardiac nerve—71 : 59.

Middle cervical ganglion—71 : 60.

Inferior cervical ganglion—71 : 62.

The remaining rami and plexuses of the cervical part of the sympathetic system are indicated in—71 : 47-54, 56, 58, 65-68.

Rectus capitis lateralis muscle**—24 : 2.

IX. Structures in Relation to the Cervical Part of the Vertebral Column and the Posterior Part of the Base of the Skull

The head and neck may be divided into anterior and posterior parts by: (a) forcibly displacing the nerves and vessels of the neck together with the oesophagus and trachea anteriorly, away from the cervical vertebrae, and exposing the periosteum investing the base of the skull between the pharynx and prevertebral muscles; (b) with a chisel and mallet making a transverse incision through the pars basilaris of the occipital bone (directing the chisel as nearly as possible at right angles to the plane of the bone); (c) making two saw-cuts through the skull, one on each side, beginning at a point 2 cm. posterior to the mastoid process and extending obliquely anteromedially to a point immediately posterior to the jugular foramen; (d) with a chisel completing the division of the base of the skull by an incision on each side uniting the end of the preceding chisel-cut (b) with the adjacent end of the saw-cut (the incision in each case passing medialward between the jugular foramen and the hypoglossal canal); (e) dividing any remaining intervening soft parts and completing the separation of the anterior and posterior parts of the head and neck. The hypoglossal nerve will be divided close to the base of the skull and superior to the ganglion nodosum of the vagus nerve, but all other cerebral nerves should remain intact and be carried away with the anterior part of the skull.

1. MUSCLES, NERVES, AND BLOOD VESSELS.

Rectus capitis lateralis muscle**—24 : 2. (Previously listed in Section VIII : 4.)

Rectus capitis anterior muscle**—24 : 65.

Longus capitis muscle**—24 : 64.

Longus colli muscle**—24 : 63.

Anterior, middle and posterior scalene muscles—24 : 66-68.

(Their attachments only.)

Anterior and posterior intertransverse muscles**—23 : 62, 63.

Cervical nerves, I-VIII—69 : 1.

May be exposed by removing the prevertebral and scalene muscles.

- Anterior rami—69: 8.
- Posterior rami—69: 2.
- Vertebral artery—48: 21.

May be exposed by removing the intertransverse muscles, the rectus capitis lateralis, the obliquus capitis superior and the obliquus capitis inferior muscles, and with a bone forceps cutting away the anterior tubercles and costal portions of the transverse processes of the third to sixth cervical vertebral.

- Spinal rami**—48: 22.
- Vertebral vein—52: 63.

2. ARTICULATIONS OF THE CERVICAL VERTEBRAE III-VII.

- Intervertebral fibrocartilages—18: 37.
- Fibrous ring—18: 38.
- Nucleus pulposus—18: 39.
- Ligamenta flava—18: 40.
- Articular capsules—18: 41.
- Intertransverse ligaments**—18: 42. (Not well developed in the neck.)
- Interspinous ligaments—18: 43.
- Ligamentum nuchae—18: 45.
- Anterior longitudinal ligament—18: 46.
- Posterior longitudinal ligament—18: 47.

3. ARTICULATIONS OF THE EPISTROPHEUS, ATLAS, AND OCCIPITAL BONE.

- Atlantooccipital articulation—19: 1.
- Articular capsule—19: 2.
- Anterior atlantooccipital membrane—19: 3.
- Posterior atlantooccipital membrane—19: 4.
- Atlantoepistropheal articulation—19: 5.
- Articular capsule—19: 6.
- Tectorial membrane—19: 11.

Demonstrated by removing (with a bone forceps) the posterior arches of the atlas and epistropheus, making a saw-cut on each side of the occipital bone, extending from just posterior to the jugular process and occipital condyle to the foramen magnum, detaching the squamous portion of the occipital bone and removing the exposed portion of the dura mater.

- Cruciate ligament of atlas—19: 10.

Exposed by detaching the tectorial membrane from the epistropheus and reflecting it upward.

- Transverse ligament of the atlas—19: 9.

- Alar ligaments—19: 7.

Demonstrated by detaching the vertical part of the cruciate ligament at its superior attachment to the occipital bone and reflecting it downward.

- Apical ligament of the dens—19: 8.

4. CERVICAL PORTION OF THE VERTEBRAL CANAL AND SPINAL CORD.

The contents of the cervical portion of the vertebral canal may be exposed by cutting away all the muscles still remaining attached to the spinous processes and arches of the cervical vertebrae and removing the laminae of the vertebral arches. For the meninges and related structures, see Thorax, V: 4.

Cervical nerves—69: 1.

Anterior roots—68: 67.

Posterior roots—68: 68.

Spinal ganglia—68: 69.

Anterior rami—68: 70.

Posterior rami—68: 71.

Spinal rami of the vertebral artery—48: 22.

Posterior spinal artery—48: 23.

Anterior spinal artery—48: 24.

Cervical part of spinal cord—58: 21.

Cervical enlargement—58: 22.

For surface anatomy and internal structure of the spinal cord see Thorax, V: 5.

X. Remaining Structures in the Anterior Part of the Head and Neck

For division of the head and neck into anterior and posterior parts see Section IX.

1. PHARYNX—32: 29, 4: 43.

a. Muscles and fascia of the pharynx.

Buccopharyngeal fascia—24: 43.

Pterygomandibular raphe—32: 52.

Tunica muscularis of the pharynx—32: 50.

Constrictor pharyngeus inferior muscle—32: 62-64.

Constrictor pharyngeus medius muscle—32: 59-61.

Constrictor pharyngeus superior muscle—32: 53-67.

Exposed by dividing the pterygoideus internus muscle transversely at its middle and reflecting the two ends toward their origin and insertion, guarding against cutting the tensor veli palatini muscle.

Fascia pharyngobasilaris—32: 44.

b. Cavity of the pharynx—32: 30.

May be exposed by making the following incisions: (*a*) longitudinally in the middle line throughout the entire extent of the posterior wall of the pharynx; (*b*) from the superior extremity of the preceding incision, transversely through the fascia pharyngobasilaris, close to the base of the cranium and extending laterally as far as the cartilage of the Eustachian tube.

The following structures may be identified by inspection:

Pars nasalis—32: 32.

Fornix pharyngis—32: 31.

Pharyngeal opening of the Eustachian tube—32: 35.

- Anterior lip—32:36.
 - Posterior lip—32:37.
 - Torus tubarius—32:38.
 - Salpingopharyngeal fold—32:39.
 - Pharyngeal recess—32:40.
 - Pharyngeal tonsil—32:47.
 - Tonsillar crypts—32:48.
 - (Pharyngeal bursa)—32:41.
 - Soft palate—30:41.
 - Uvula—32:13.
 - Pars oralis—32:33.
 - Glossopalatine arch—32:15.
 - Pharyngopalatine arch—32:16.
 - Lateral glossoepiglottic fold—37:27.
 - Median glossoepiglottic fold—37:26.
 - Epiglottic vallecula—37:12.
 - Pars laryngis—32:34.
 - Aryepiglottic fold—37:28.
 - Aditus laryngis—37:13.
 - Piriform recess—32:42.
 - Fold of the laryngeal nerve—37:29.
- Looking anteriorly from the nasal part of the pharynx the following are visible in relation to the posterior part of the nasal cavity:
- Nasal septum—35:39.
 - Nasopharyngeal meatus—35:59.
 - Inferior nasal meatus—35:57.
 - Middle nasal meatus—35:55.
 - Inferior nasal concha—35:48.
 - Middle nasal concha—35:47.

2. MOUTH AND FAUCES.

To facilitate the demonstration of the following structures the anterior part of the head and neck may be divided into two lateral halves by making the following incisions: (*a*) with a knife dividing the uvula and soft palate in the median sagittal plane; (*b*) in a similar manner dividing the cartilaginous part of the nose as far as the nasal bone as nearly as possible in the mid-sagittal plane, (before making this incision it should be ascertained whether the nasal septum deviates to either the right or left of the mid-plane, and if so, making the cut through the cartilage close to the concave side of the septum, thus guarding against cutting the septum itself); (*c*) with a saw cutting through the floor of the anterior part of the skull, beginning posteriorly and sawing forward, making the cut pass through the hard palate and root of the nose just lateral to the nasal septum and, in line with preceding incision, through the cartilaginous part of the nose; (*d*) with a knife dividing the tongue and soft structures in the floor of the mouth, the pharynx, larynx, trachea, and any other remaining soft structures in the median sagittal plane; (*e*) completing the division by sawing through the anterior part of the mandible in the same plane.

a. General characteristics of the oral cavity.

- Cheek—30 : 29.
- Fat body of the cheek**—30 : 30.
- Vestibule of the mouth—30 : 31.
- Mouth cavity proper—30 : 32.
- Oral fissure—30 : 33.
- Lips—30 : 34–36.
- Labial commissure—30 : 37.
- Angles of the mouth—30 : 38.
- Palate—30 : 39.
- Hard palate—30 : 40.
- Soft palate—30 : 41.
- Raphe of the palate—30 : 42.

b. Mucous membrane of the mouth—30 : 43.

- Frenulum of the upper and lower lips—30 : 44, 45.
- Gum—30 : 46.
- Sublingual caruncle—30 : 47.
- Sublingual fold—30 : 48.
- Transverse palatine folds—30 : 49.
- Incisor papilla—30 : 50.

c. Glands of the mouth—31 : 1.

Only the openings of the ducts of the following glands can be demonstrated at this stage of the dissection.

- Sublingual glands—31 : 8.
- Major and minor ducts**—31 : 9, 10.
- Submaxillary gland—31 : 11.
- Submaxillary duct—31 : 12.
- Parotid gland—31 : 13–15.
- Parotid duct—31 : 16.

The following structures are usually difficult to demonstrate in an ordinary dissection:

- Labial glands**—31 : 2.
- Buccal glands**—31 : 3.
- Molar glands**—31 : 4.
- Palatine glands**—31 : 5.
- Lingual glands**—31 : 6.
- Anterior lingual gland**—31 : 7.

d. Teeth—31 : 18.

- Superior and inferior dental arches—31 : 45, 46.
- Incisor teeth—31 : 47.
- Canine teeth—31 : 48.
- Premolar teeth—31 : 49.
- Molar teeth—31 : 50.
- Dens serotinus—31 : 51.
- Permanent and deciduous teeth—31 : 52, 53.

e. Tongue—31: 54.

Dorsum of the tongue—31: 55.

Root of the tongue—31: 56.

Body of the tongue—31: 57.

Inferior surface—31: 58, 59.

Lateral margin—31: 60.

Apex—31: 61.

Mucous membrane—31: 62.

For the muscles and papillae of the tongue see X: 7.

f. Fauces—32: 10.

Isthmus of the fauces—32: 11.

Velum palatinum—32: 12.

Uvula—32: 13.

Palatine arches—32: 14.

Glossopalatine arches—32: 15.

Pharyngopalatine arches—32: 16.

Salpingopalatine fold**—32: 17.

Palatine tonsil—32: 18.

Tonsillar crypts—32: 19.

Tonsillar sinus—32: 20.

Plica triangularis—32: 21.

Supratonsillar fossa—32: 22.

3. SOFT PALATE AND RELATED STRUCTURES.

A satisfactory dissection of the soft palate is made with difficulty in the ordinary cadaver material; in demonstrating its structures the soft palate should be made tense by means of a hook and the mucous membrane removed from its oral and pharyngeal surfaces and from the surface of the glossopalatine and pharyngopalatine arches.

a. Muscles.

Glossopalatine muscle**—32: 27.

Pharyngopalatine muscle**—32: 28.

Salpingopharyngeus muscle**—32: 58.

Uvulae muscle**—32: 26.

Levator veli palatini muscle**—32: 24.

May be exposed by removing the wall of the pharynx between the auditory tube superiorly and the upper margin of the superior pharyngeal constrictor muscle inferiorly.

Tensor veli palatini muscle—32: 25.

b. Arteries.

Ascending palatine artery**—47: 14.

Pharyngeal rami of the ascending pharyngeal artery**—
47: 6.

Descending palatine from the internal maxillary artery**
—47: 62.

c. Nerves.

Pharyngeal rami of the vagus nerve**—68:28.

Component fibres of these rami are derivatives of the accessory nerve.

Nerve of the tensor veli palatini**—67:38.

Posterior palatine nerve**—67:5.

Middle palatine nerve**—67:4.

4. AUDITORY TUBE—78:11.

Osseous part of the auditory tube—78:13.

Cartilaginous part of the auditory tube—78:16.

Cartilage of the auditory tube—78:17.

Medial cartilaginous lamina—78:18.

Lateral cartilaginous lamina—78:19.

Membranous lamina—78:20.

Tunica mucosa—78:21-23.

Pharyngeal opening of the auditory tube—78:24.

5. NASAL CAVITY.

a. Nasal septum—35:39.

Cartilaginous septum—35:40.

May be exposed by removing the mucous membrane from one side of the septum.

Membranous septum—35:41.

The following structures may be demonstrated by carefully removing the cartilage and thin bony part of the septum (a small piece at a time), but retaining intact the mucous membrane of the opposite side.

Olfactory nerves—66:3.

Branches of the sphenopalatine ganglion:

Medial superior posterior nasal rami**—66:62.

Nasopalatine nerve—66:63.

Medial nasal rami of the internal branch of the anterior ethmoidal nerve**—66:31.

Posterior nasal arteries of the septum**—47:67.

Anterior and posterior ethmoidal arteries**—48:6, 7.

Difficult to demonstrate in ordinary material.

b. Cavity and lateral walls of the nose.

Nares—35:37.

Choanae—35:38.

Vestibule of the nose—35:42.

Vibrissae—79:34.

Limen nasi—35:43.

Olfactory sulcus—35:44.

Superior nasal concha—35:46.

Middle nasal concha—35:47.

Inferior nasal concha—35:48.

- (Concha suprema)—35:45.
- Mucous membrane—35:49.
- Cavernous plexus of the concha—35:50.
- Agger nasi—35:51.
- Sphenoethmoidal recess—35:52.
- Meatuses of the nose—35:53.
 - Superior meatus—35:54.
 - Middle meatus—35:55.
 - Atrium of the middle meatus—35:56.
 - Inferior meatus—35:57.
 - Common meatus—35:58.
 - Nasopharyngeal meatus—35:59.
- Respiratory region—35:60.
- Olfactory region—35:61.
- Olfactory glands—35:62.
- Nasal glands—35:71.
- Ethmoidal infundibulum—35:68.
 - Exposed by forcing the middle concha upwards.
- Hiatus semilunaris—35:70.
- Bulla ethmoidalis—35:68.
- Nasolacrimal duct—75:54. (Its inferior opening only.)
- Ethmoidal cells—35:67. (Only their openings are exposed.)

c. Paranasal sinuses—35:63.

Maxillary sinus—35:64.

Its cavity may be exposed by sawing upwards through the base of the zygomatic process of the maxilla and removing its lateral wall.

Sphenoidal sinus—35:65.

Frontal sinus—35:66.

d. Nerves and vessels in the lateral wall of the nasal cavity.

Olfactory nerves—66:3.

Lateral nasal rami of the internal branch of the anterior ethmoidal nerve**—66:30.

Branches from the sphenopalatine ganglion:

Lateral superior posterior nasal rami**—66:61.

Difficult to demonstrate in an ordinary dissection.

[Lateral] inferior posterior nasal rami**—67:1.

Sphenopalatine artery—47:66.

The descending palatine branch of the internal maxillary artery—47:62, and the anterior and posterior ethmoidal arteries—48:6, 7, also contribute small twigs to the nasal muco-periosteum.

e. Nasal cartilages—36:6.

Lateral nasal cartilage**—36:9.

Cartilage of the nasal septum**—36:7. (See also X:5a.)

Greater alar cartilages**—36:10.

Lateral crus**—36: 12.
 Medial crus**—36: 11.
 Lesser alar cartilages**—36: 13.

6. LARYNX—36: 18.

a. Cavity of the larynx—37: 11.

The laryngeal cartilages constituting the ground plan of the larynx are listed under subhead 6*d*.

Aperture of the larynx—37: 13.

Aryepiglottic fold—37: 28.

Cuneiform tubercle—36: 74.

Corniculate tubercle—36: 75.

Interarytenoid notch—37: 35.

Median glossoepiglottic fold—37: 26.

Lateral glossoepiglottic fold—37: 27.

Epiglottic vallecula—37: 12.

Vestibule of the larynx—37: 14.

Rima vestibuli—37: 15.

Ventricular folds—37: 30.

Superior aperture of the glottis—37: 34.

Laryngeal ventricle—37: 21.

Appendix of the laryngeal ventricle—37: 22.

Vocal fold—37: 31.

Macula flava—37: 32.

The vocal and ventricular folds subdivide the laryngeal cavity into three subdivisions: a superior, or the vestibule; a middle subdivision, corresponding to the ventricles; and an inferior subdivision, inferior to the level of the vocal cords.

Vocal lips—37: 16.

Glottis—37: 17.

Rima glottidis—37: 18.

Intermembranous part—37: 19.

Intercartilaginous part—37: 20.

Inferior aperture of the glottis—37: 33.

Laryngeal mucous membrane—37: 23.

Laryngeal glands—37: 36–39.

Lymphatic nodules of the larynx—37: 40.

b. Laryngeal muscles, hyothyreoid and elastic membranes.

Having examined the relations of the thyreoid gland, the following structures may be exposed by removing this organ together with the omohyoid, sternohyoid, sternothyreoid, thyreohyoid, and inferior pharyngeal constrictor muscles, guarding against injury to the internal and external rami of the superior laryngeal nerve, the inferior laryngeal nerve, and the superior and inferior laryngeal arteries.

Hyothyreoid membrane—36: 34.

Middle hyothyreoid ligament—36: 33.

Lateral hyothyreoid ligament—36: 31.

Triticeous cartilage**—36: 32.

Cricothyreoid muscle—36: 78.

Straight part—36: 79.

Oblique part—37: 1.

Posterior cricoarytaenoid muscle—37: 2.

Exposed by removing the tunica mucosa from the posterior aspect of the cricoid and arytaenoid cartilages, retaining intact, however, the superior and inferior laryngeal arteries and nerves.

Oblique arytaenoid muscle—37: 9.

Aryepiglottic muscle—36: 77.

Transverse arytaenoid muscle—37: 10.

It is preferable to demonstrate the following muscles and the elastic membrane in only one half of the larynx, reserving the other half for the demonstration of nerves and vessels.

Lateral cricoarytaenoid muscle—37: 4.

Exposed by removing the cricothyroid muscle, making an incision through the lamina of the thyroid cartilage parallel to and a little to the right of the anterior median line, dividing the right lateral hyothyroid ligament, disarticulating the right inferior cornu of the thyroid cartilage and completing the removal of the lamina.

Thyreoarytaenoid muscle—37: 8.

Vocal muscle—37: 6.

May be exposed by carefully removing the lateral cricoarytaenoid muscle.

Thyreoepiglottic muscle—37: 7.

Ventricular muscle—37: 5.

Difficult to demonstrate in an ordinary dissection.

Elastic membrane of the larynx—37: 24.

Exposed by removing the vocal muscle.

Elastic cone—37: 25.

Vocal ligament—36: 63.

(Sesamoid cartilage)—36: 64.

Ventricular ligament—36: 62.

c. Laryngeal nerves and vessels.

The following structures may be demonstrated in the remaining half of the larynx:

Internal ramus of the superior laryngeal nerve—68: 32.

Its position in the piriform sinus may be determined by producing a traction on the nerve external to the hyothyroid membrane and demonstrating the fold of the laryngeal nerve—37: 29.

Anastomotic ramus with the inferior laryngeal nerve**
—68: 33.

Inferior laryngeal nerve—68: 40.

Anterior ramus—68: 41.

Posterior ramus—68: 42.

Superior laryngeal artery—46: 64.

Inferior laryngeal artery—48: 50.

d. Laryngeal cartilages and ligaments.

- Epiglottis—36 : 67.
 - Petiolus epiglottidis—36 : 68.
 - Epiglottic tubercle—36 : 69.
 - Epiglottic cartilage—36 : 70.
- Thyreoepiglottic ligament—36 : 71.
- Hyoepiglottic ligament—36 : 72.
- Thyroid cartilage—36 : 21.
 - Right and left lamina—36 : 22.
 - Prominentia laryngea—36 : 16.
 - Superior thyroid incisure—36 : 23.
 - Inferior thyroid incisure—36 : 24.
 - Superior thyroid tubercle—36 : 25.
 - Inferior thyroid tubercle—36 : 26.
 - (Oblique line)—36 : 27.
 - Superior cornu—36 : 28.
 - Inferior cornu—36 : 29.
 - (Thyroid foramen)—36 : 30.
- Cricothyroid articulation—36 : 40.
 - Articular capsule—36 : 41.
 - Ceratocricoid ligaments**—36 : 42-44.
- Cricoid cartilage—36 : 35.
 - The exposure of the cricoid cartilage may be completed by dividing the ligaments connecting the thyroid and cricoid cartilages and removing the thyroid cartilage.
 - Arch—36 : 36.
 - Lamina—36 : 37.
 - Arytaenoid articular surface—36 : 38.
 - Thyroid articular surface—36 : 39.
- Cricotracheal ligament—36 : 46.
- Corniculate cartilage—36 : 57.
 - Arycorniculate synchondrosis—36 : 58.
 - Corniculopharyngeal ligament**—36 : 61.
 - Cricopharyngeal ligament**—36 : 60.
- Arytaenoid cartilage—36 : 47.
 - Apex—36 : 54.
 - Base—36 : 49.
 - Articular surface—36 : 48.
 - Crista arcuata**—36 : 50.
 - Colliculus**—36 : 51.
 - Fovea oblonga**—36 : 52.
 - Fovea triangularis**—36 : 53.
 - Vocal process—36 : 55.
 - Muscular process—36 : 56.
- Cuneiform cartilage—36 : 73.
- Cricoarytaenoid articulation—36 : 59.
 - Articular capsule—36 : 65.
 - Posterior cricoarytaenoid ligament**—36 : 66.

7. TONGUE—31: 54.

a. General characteristics and surface anatomy.

- Dorsum of tongue—31: 55.
- Root of tongue—31: 56.
- Body of tongue—31: 57.
- Inferior surface—31: 58.
- Fimbriated fold—31: 59.
- Lateral margin—31: 60.
- Apex of tongue—31: 61.
- Mucous membrane of tongue—31: 62.
- Frenulum of tongue—31: 63.
- Lingual papillae—31: 64.
- Filiform papillae—31: 65.
- Conical papillae—31: 66.
- Fungiform papillae—31: 67.
- Lenticular papillae—31: 68.
- Vallate papillae—31: 69.
- Foliate papillae—31: 70.
- Medial sulcus—31: 71.
- Terminal sulcus—31: 72.
- Foramen caecum—31: 73.
- (Lingual duct)—31: 74.
- Thyreoglossal duct—31: 75.
- Lingual tonsil—31: 76.
- Lingual follicles—31: 77.

b. Muscles of the tongue—32: 1.

Preferably demonstrated in one half of the tongue only, retaining the other half for the demonstration of nerves and vessels.

- Genioglossus muscle—32: 2.
- Hyoglossus muscle—32: 3.
- Chondroglossus muscle**—32: 4.
- Styloglossus muscle—32: 5.
- The four preceding muscles may be characterized as extrinsic and the next three as intrinsic muscles of the tongue:
- Longitudinalis superior muscle**—32: 6.
- Longitudinalis inferior muscle**—32: 7.
- Transversus linguae muscle**—32: 8.
- Verticalis linguae muscle**—32: 9.
- Septum of tongue—31: 78.

c. Nerves and vessels of the tongue.

- Lingual rami of the glossopharyngeal nerve—68: 21.
- Lingual nerve—67: 23.
- Sublingual nerve—67: 26.
- Lingual rami—67: 27.
- Hypoglossal nerve—68: 60.
- Lingual rami—68: 64.
- Lingual artery—47: 8.

Dorsal rami of tongue—47: 11.

Deep artery of tongue—47: 12.

8. STRUCTURES IN THE MIDDLE CRANIAL FOSSA.

Incisions for removal of the dura mater: (*a*) having secured the cut ends of the oculomotor, trochlear, and trigeminal nerves as they pierce the dura, an incision is made through the dura just lateral to these nerves from the anterior clinoid process to the apex of the petrous portion of the temporal bone (the cut should be made no deeper than the thickness of the dura), and then extended from the apex of the petrous bone backward and laterally along the superior petrosal sinus to the sigmoid sulcus; (*b*) a second incision is made through the dura from the clinoid process anterolaterally along the posterior margin of the small wing of the sphenoid bone; (*c*) the dura may then be reflected lateralward, carefully disengaging it from any underlying nerves or other structures which may be attached to it.

Cavernous sinus—53: 24.

Superior ophthalmic vein—53: 54.

Inferior ophthalmic vein—53: 68.

Sphenoparietal sinus—53: 28.

Trigeminal nerve—66: 11.

Portio major—66: 12.

Portio minor—66: 14.

Semilunar ganglion—66: 13.

Mandibular nerve—67: 6. (Origin and foramen of exit only.)

An accessory meningeal artery—(47: 51) is sometimes associated with it in its foramen of exit.

Maxillary nerve—66: 38. (Origin and foramen of exit.)

Meningeal ramus—66: 39.

Ophthalmic nerve—66: 15.

Lacrimal nerve—66: 17. (Its origin only.)

Nasociliary nerve—66: 23. (Its origin only.)

Frontal nerve—66: 19. (Its origin only.)

The following first three nerves are listed with reference to their relations to the cavernous sinus only:

Oculomotor nerve—66: 5.

Trochlear nerve—66: 9.

Abducent nerve—67: 46.

Cavernous plexus of the sympathetic—71: 39. (Difficult to demonstrate.)

Internal carotid artery—47: 68.

Ophthalmic artery—47: 70. (Its origin only.)

Internal carotid plexus of the sympathetic—71: 38. (Difficult to demonstrate in an ordinary dissection.)

Greater superficial petrosal nerve—66: 59.

Lesser superficial petrosal nerve—67: 37.

Middle meningeal artery—47: 50.

Superficial petrosal ramus**—47: 52.

(Accessory meningeal ramus)—47: 51.

9. EYELIDS AND LACRIMAL APPARATUS.

For the surface anatomy of the eye see Section V: 1.

a. Eyelids—75: 11.

In demonstrating the following structures the palpebral part of the orbicularis oculi muscle may be removed, guarding against injury to underlying nerves and vessels.

Orbital septum—75: 5.

Superior tarsus—75: 23.

Inferior tarsus—75: 24.

Tarsal glands—75: 27.

Lateral palpebral raphe—75: 26.

Medial palpebral ligament—75: 25.

Levator palpebrae superioris muscle—75: 3. (Its tendon of insertion only.)

For nerves and vessels of the eyelids see I: 2a and V: 4.

b. Lacrimal apparatus—75: 41.

Superior lacrimal gland—75: 42.

Should be identified with a minimum dissection.

May be exposed by dividing the palpebral fascia at the upper and lateral angle of the orbit.

Inferior lacrimal gland—75: 43.

(Accessory lacrimal gland)—75: 44.

Excretory ductules—75: 45.

Lacrimal duct—75: 49.

Exposed by reflecting the medial palpebral ligament.

Ampulla of the lacrimal duct—75: 51.

Lacrimal sac—75: 52.

Fornix of the lacrimal sac—75: 53.

Nasolacrimal duct—75: 54.

The following muscles may be exposed by dividing the eyelids through the middle by a sagittal section and removing the conjunctiva at the medial angle of the eye.

Tarsalis superior muscle**—75: 29.

Tarsalis inferior muscle**—75: 30.

10. STRUCTURES IN RELATION TO THE ORBIT.

a. Structures in the superior part of the orbit and fascia of the eyeball.

Exposed by removing (with a bone forceps, saw, and chisel) the thin roof or superior wall of the orbit (12: 67), the thick cranial wall above the orbital opening (12: 64), and the superior wall of the superior orbital fissure (12: 71), retaining intact, however, the supra-orbital margin (12: 65) of the orbital opening and a ring of bone around the optic foramen (cutting away the anterior clinoid process will also facilitate the subsequent dissection); divide the periosteum longitudinally midway between the medial and lateral walls of the orbit and also transversely close to the anterior margin of the superior orbital wall, and reflect the two periosteal flaps laterally and medially.

Frontal nerve—66: 19.

Supraorbital nerve—66: 20.

Frontal ramus—66: 21.

Supratrochlear nerve**—66: 22.

Attention has already been directed to the peripheral distribution of these nerves, I: 2*a* and V: 4.

Corpus adiposum orbitae—75: 9.

To be removed gradually during the ensuing dissection.

Trochlear nerve—66: 9.

Lacrimal nerve—66: 17.

Lacrimal glands—76: 42–45. (See also 9*b*.)

Levator palpebrae superioris muscle—75: 3.

Fascia of eyeball—75: 7.

May be exposed by dividing the frontal nerve and levator palpebrae superioris muscle in the middle of the orbit and reflecting their cut ends.

Interfascial space—75: 8.

Its extent may be determined by making an opening through fascia and introducing the handle of a scalpel or a blunt forceps into the opening.

Rectus superior muscle—74: 65.

Obliquus superior muscle—74: 71.

Trochlea—75: 1.

b. Optic nerve, nasociliary nerve, and ciliary ganglion.

The following structures may be exposed by dividing superior rectus muscle midway between its origin and insertion, reflecting the cut ends (noting the superior division of the oculomotor nerve subjacent to its posterior part), and carefully removing the orbital fat.

Optic nerve—66: 4.

Nasociliary nerve—66: 23.

Long root of the ciliary ganglion—66: 24.

Long ciliary nerves—66: 25.

Posterior ethmoidal nerve—66: 26.

Anterior ethmoidal nerve—66: 27.

Infratrochlear nerve—66: 33–35.

Ciliary ganglion—66: 36.

Short ciliary nerves—66: 37.

c. Blood vessels of the orbit.

Ophthalmic artery—47: 70.

Central artery of retina—47: 71.

Lacrimal artery—47: 72.

Muscular rami—47: 74.

Ciliary arteries—47: 75, 76, 48: 1–4.

Supraorbital artery—48: 5.

Anterior and posterior ethmoidal arteries—48: 6, 7.

Medial palpebral arteries—48: 9–11.

Frontal artery—48: 12.

Dorsal artery of nose—48: 13.

Superior ophthalmic vein—53: 54.

Inferior ophthalmic vein—53:68.

Central vein of retina—53:63.

Tributaries of the ophthalmic veins are indicated in 53:55, 53:64-67.

d. Remaining structures of the orbit.

Rectus medialis muscle—74:67.

Rectus inferior muscle—74:66.

Rectus lateralis muscle—74:68.

Lacertus of rectus lateralis muscle**—74:69.

Common tendinous ring of Zinn—74:70.

May be exposed by dividing the optic nerve close to the optic foramen and turning the eyeball anteriorly.

Oculomotor nerve—66:5.

Superior ramus—66:6.

Inferior ramus—66:7.

Short root of ciliary ganglion—66:8.

Abducens nerve—67:46.

Obliquus inferior muscle—75:2.

May be exposed by replacing the eyeball in its normal position, everting the lower eyelid, carefully removing the conjunctiva in the region of the inferior fornix.

Zygomatic nerve—66:40.

11. STRUCTURES IN THE CAROTID AND INFRAORBITAL CANALS, AND IN THE PTERYGOPALATINE FOSSA.

a. Carotid canal—9:41.

The contents of the carotid canal may be exposed by removing (with a bone forceps) the inferior wall of the carotid canal, guarding against injury to the auditory tube.

Internal carotid artery—47:68.

Caroticotympanic ramus**—47:69.

Internal carotid nerve of sympathetic system—71:37.

Internal carotid plexus—71:38.

Deep petrosal nerve—66:60. (Its origin only.)

b. Maxillary nerve and infraorbital canal.

The structures in relation to the infraorbital canal and pterygopalatine fossa may be exposed by making the following dissections: (a) beginning at the cut margin of the skull just above the external acoustic meatus, saw through the squamous part of the temporal bone and great wing of the sphenoid bone in a plane passing obliquely downward and forward to the medial end of the superior orbital fissure, the saw-cut passing just lateral to the foramen rotundum; (b) make a second saw-cut extending from the cut margin of the cranial wall, just above the anterior margin of the great wing of the sphenoid, downward into the superior orbital fissure, joining the first saw-cut; (c) detach the wedge of bone included between the two saw-cuts and with a bone forceps remove what remains of the great wing of the sphenoid bone lateral to the foramen rotundum, retaining intact, however, the bony circumfer-

ence of this aperture; (d) and, finally, with a bone forceps (and chisel if necessary) remove the superior wall of the infraorbital canal.

Maxillary nerve—66:38.

Zygomatic nerve—66:40.

Sphenopalatine nerves—66:43.

Posterior superior alveolar rami—66:45.

Infraorbital nerve—66:46.

Middle superior alveolar ramus—66:47.

Anterior superior alveolar rami—66:48.

Superior dental plexus—66:49.

This plexus also includes the posterior superior alveolar rami.

Superior dental rami—66:50.

Superior gingival rami—66:51.

Infraorbital artery—47:60.

Anterior superior alveolar arteries—47:61.

c. *Sphenopalatine ganglion.*

The sphenopalatine ganglion may be located by following the lateral superior nasal rami, together with the nasopalatine nerve, back to the sphenopalatine foramen, and the lateral posterior inferior rami of the anterior palatine nerve back to the pterygopalatine canal, carefully opening the canal and following the palatine nerves upward to the sphenopalatine ganglion which is situated in the pterygopalatine fossa; the exposure of the ganglion may also be facilitated by removing the orbital process of the palatine bone and a portion of the body of the sphenoid bone.

Sphenopalatine ganglion—66:56.

Nerve of the pterygoid canal—66:58.

This nerve may be exposed by cutting away the sphenoidal process of the palate bone and carefully opening the pterygoid canal of the sphenoid bone, a dissection difficult, however, to make.

Greater superficial petrosal nerve—66:59.

Deep petrosal nerve—66:60.

Orbital rami**—66:57.

Lateral superior posterior nasal rami**—66:61.

Medial superior posterior nasal rami**—66:62.

Nasopalatine nerve—66:63.

[Lateral] inferior posterior nasal rami**—67:1.

Palatine nerves—67:2.

Anterior palatine nerve**—67:3.

Middle palatine nerve**—67:4.

Posterior palatine nerve**—67:5.

d. *Internal maxillary artery.*

The following terminal branches of the internal maxillary artery are in relation to the pterygopalatine fossa with reference to their origin only.

Posterior superior alveolar artery—47:59.

Infraorbital artery—47: 60.

Descending palatine artery—47: 62.

Sphenopalatine artery—47: 66.

12. AUDITORY APPARATUS: EXTERNAL AND MIDDLE EAR.

It will be observed that the incisions made through the skull in the course of the preceding dissections have resulted in the isolation of a somewhat wedge-shaped segment of the cranium including the greater part of the temporal bone and the organ of hearing. With reference to the three subdivisions of the organ of hearing, some of the structures relative to the external ear have already been listed under Section I: 4, and attention directed to the auditory tube of the middle ear under Section X: 4.

a. *Walls of the tympanic cavity.*

The tympanic cavity and its several walls may be demonstrated by removing the squamous part of the temporal bone by a horizontal saw-cut made just above the level of the petrous part of the temporal bone and making an opening through the tegmen tympani of the temporal bone (9: 12) just lateral to the arcuate eminence (9: 13), and about 1 cm. anterior to the superior angle (9: 8) of the pars petrosa or pyramid (9: 3), thus exposing the tympanic antrum of the mastoid wall of the tympanic cavity (77: 17); this opening may then be carefully enlarged with a bone forceps and the entire roof or tegmental wall of the tympanic cavity removed.

Tegmental wall—75: 69.

Epitympanic recess—77: 1.

Pars cupularis—77: 2.

Jugular wall—77: 3.

Styloid prominence**—77: 4.

Mastoid wall—77: 16.

Tympanic antrum—77: 17.

Prominence of lateral semicircular canal—77: 18.

Prominence of facial canal—77: 19.

Pyramidal eminence—77: 20.

Fossa of incus**—77: 21.

Posterior sinus**—77: 22.

Tympanic aperture of canaliculus of the chorda—
77: 23.

Carotid wall—77: 26.

Labyrinthine wall—77: 5.

Fenestra vestibuli—77: 6, 7.

Promontory—77: 8-10.

Sinus of tympanum**—77: 11.

Fenestra cochlae—77: 12-14.

Processus cochleariformis**—77: 15.

Mastoid cells—77: 24.

Tympanic cells—77: 25.

Membranous wall—77: 27.

Tympanic membrane—77: 28.

Pars flaccida—77: 29.

Pars tensa—77: 30.

Limbus membranae tympani—77: 31.

Anterior malleolar fold—77: 32.

Posterior malleolar fold—77: 33.

Malleolar prominence—77: 34.

Malleolar stria—77: 35.

Umbo membranae tympani—77: 36.

Fibrocartilaginous ring—77: 38.

Structurally the tympanic membrane consists of several tissue layers—77: 37-41.

Mucous membrane of the tympanic cavity—78: 1.

b. Auditory ossicles, articulations, ligaments, and muscles.

Stapes—77: 43.

Head—77: 44.

Anterior limb—77: 45.

Posterior limb—77: 46.

Base—77: 47.

Incus—77: 48.

Body—77: 49.

Long limb—77: 50.

Lenticular process—77: 51.

Short limb—77: 52.

Malleus—77: 53.

Manubrium—77: 54.

Head—77: 55.

Neck—77: 56.

Lateral process—77: 57.

Anterior process—77: 58.

Articulations of the auditory ossicles—77: 59.

Articulation between incus and malleus—77: 60.

Articulation between incus and stapes—77: 61.

Syndesmosis of stapes and tympanum—77: 62.

Ligaments of the auditory ossicles—77: 63.

The following ligaments are difficult to expose in an ordinary dissection:

Anterior ligament of malleus**—77: 64.

Superior ligament of malleus**—77: 65.

Lateral ligament of malleus**—77: 66.

Superior ligament of incus**—77: 67.

Posterior ligament of incus**—77: 68.

Obturator membrane of stapes**—77: 69.

Annular ligament of base of stapes**—77: 70.

Muscles of auditory ossicles—77: 72.

Tensor tympani muscle—77: 73.

Stapedius muscle—77: 74.

Auditory tube—78: 11. (See also Section X: 4.)

c. External acoustic meatus—78:25.

Its interior is exposed by removing (with a bone forceps and chisel) the anterior wall of the external acoustic meatus, guarding against injury to the tympanic membrane.

External acoustic porus—78:26.

Tympanic incisure—78:27.

Cartilaginous external acoustic meatus—78:28.

Cartilage of acoustic meatus—78:29-31.

The auricle of the external ear has been dealt with under Section I: 4.

13. INTRAOSSEOUS COURSE OF THE FACIAL, INTERMEDIATE, AND ACOUSTIC NERVES.

The squamous portion of the temporal bone has already been removed, X: 12a, and the upper part of the petrous part of the bone may now be removed by a horizontal saw-cut just above the roof of the internal acoustic meatus, the cut extending laterally into the tympanum. In relation to the mastoid wall of the tympanum attention has already been directed to the prominence of the facial canal in which runs the facial nerve, X: 12a. This canal may now be opened with a bone forceps and chisel, followed into the labyrinthine wall of the tympanum, the roof of the internal acoustic meatus removed and the facial nerve exposed throughout the superior part of the facial canal. The inferior part of the facial canal may be demonstrated by removing the bone posterior and lateral to it by means of the two following saw-cuts: (a) a frontal (vertical transverse) cut in a plane just posterior to the stylomastoid foramen; (b) a sagittal (vertical anteroposterior) cut just lateral to the stylomastoid foramen to meet the first cut, removing the excised bone with a bone forceps and chisel.

Facial nerve—67:47.

Genu of the facial nerve—67:48.

Geniculate ganglion—67:49.

Stapedius nerve—67:50.

Anastomosing ramus with the tympanic plexus—67:51.

Intermediate nerve—67:63.

Greater superficial petrosal nerve—66:59.

This nerve, while transmitting sensory fibers of the intermediate nerve, is classed systematically with the sphenopalatine ganglion and not as a branch of the intermediate nerve.

Chorda tympani—67:64.

Acoustic nerve—67:65.

14. AUDITORY APPARATUS: INTERNAL EAR.

a. Osseous labyrinth—76:31.

May either be exposed by carefully chiselling away parts of the temporal bone or by means of the following saw-cuts: (a) an antero-posterior cut extending from the superior surface of the petrous portion of the temporal bone downward to the floor of the tympanum, along the junction of its medial and posterior walls; (b) a horizontal cut extending from the apex of the petrous part of the temporal bone laterally to the tympanum, intersecting the vertical incision and entering the tympanic cavity at the level of the middle of the promontory.

The demonstration of the smaller structural details of the vestibulum, cochlea and internal acoustic meatus requires special preparations and the aid of lenses.

- Vestibulum—76 : 32.
 - Recessus sphaericus—76 : 33.
 - Recessus ellipticus—76 : 34.
 - Crista vestibuli—76 : 35.
 - Pyramis vestibuli—76 : 36.
 - Recessus cochlearis—76 : 37.
 - Maculae cribrosae—76 : 38.
 - Macula cribrosa superior—76 : 39.
 - Macula cribrosa media—76 : 40.
 - Macula cribrosa inferior—76 : 41.
 - Canales semicirculares ossei—76 : 42.
 - Canalis semicircularis superior—76 : 43.
 - Canalis semicircularis posterior—76 : 44.
 - Canalis semicircularis lateralis—76 : 45.
 - Ampullae osseae—76 : 46.
 - Ampullae ossea superior—76 : 47.
 - Ampullae ossea posterior—76 : 48.
 - Ampullae ossea lateralis—76 : 49.
 - Crura ampullaria—76 : 50.
 - Crus commune—76 : 51.
 - Crus simplex—76 : 52.
- Cochlea—76 : 53.
 - Cupula—76 : 54.
 - Basis cochleae—76 : 55.
 - Canalis spiralis cochleae—76 : 56.
 - Modiolus—76 : 57.
 - Basis modioli—76 : 58.
 - Lamina modioli—76 : 59.
 - Lamina spiralis ossea—76 : 60.
 - Ramulus laminae spiralis—76 : 61.
 - Scala vestibuli—76 : 62.
 - Scala tympani—76 : 63.
 - Helicotrema—76 : 64.
 - Lamina spiralis secundaria—76 : 65.
 - Canalis spiralis modioli—76 : 66.
 - Canalis longitudinales modioli—76 : 67.
- Meatus acusticus internus—76 : 68.
 - Porus acusticus internus—76 : 69.
 - Fundus meatus acustici interni—76 : 70.
 - Crista transversa—76 : 71.
 - Area n. facialis—76 : 72.
 - Area cochleae—76 : 73.
 - Tractus spiralis foraminosus—76 : 74.
 - Area vestibularis superior—76 : 75.
 - Area vestibularis inferior—76 : 76.
 - Foramen singulare—76 : 77.

b. Membranous labyrinth—75 : 59.

An adequate demonstration of some of the following structures requires sections and the aid of a hand-lens or dissecting microscope.

- Ductus endolymphaticus—75 : 60.
- Saccus endolymphaticus—75 : 61.
- Ductus utriculosaccularis—75 : 62.
- Utriculus—75 : 63.
- Ductus semicirculares—75 : 64.
 - Ductus semicircularis superior—75 : 65.
 - Ductus semicircularis posterior—75 : 66.
 - Ductus semicircularis lateralis—75 : 67.
- Ampullae membranaceae—75 : 68.
- Sulcus ampullaris—75 : 69.
- Crista ampullaris—75 : 70.
- Ampulla membranacea superior—75 : 71.
- Ampulla membranacea posterior—75 : 72.
- Ampulla membranacea lateralis—75 : 73.
- Sacculus—75 : 74.
- Ductus reuniens [Henseni]—75 : 75.
- Maculae acusticae—75 : 76.
 - Macula acustica utriculi—75 : 77.
 - Macula acustica sacculi—75 : 78.
- Otoconia—76 : 1.
- Endolympha—76 : 2.
- Perilympha—76 : 3.
- Spatium perilymphaticum—76 : 4.
- Ductus perilymphatici—76 : 5.
- Ductus cochlearis—76 : 6.
 - Caecum cupulare—76 : 7.
 - Caecum vestibulare—76 : 8.
 - Lamina basilaris—76 : 9.
 - Membrana vestibularis (Reissneri)—76 : 10.
 - Lig. spirale cochleae—76 : 11.
 - Prominentia spiralis—76 : 12.
 - Stria vascularis—76 : 13.
 - Sulcus spiralis—76 : 14.
 - Labium tympanicum—76 : 15.
 - Foramina nervosa—76 : 16.
 - Labium vestibulare—76 : 17.
 - Ganglion spirale cochleae—76 : 18.
 - Organon spirale [Cortii]—76 : 19.
- c. Vessels of the internal ear***—76 : 20.
 - Internal auditory artery—76 : 21.
 - Vestibular rami—76 : 22.
 - Cochlear ramus—76 : 23.
 - Arterial glomeruli of cochlea—76 : 24.
 - Internal auditory veins—76 : 25.
 - Spiral vein of the modiolus—76 : 26.
 - Vas prominens—76 : 27.
 - Vestibular veins—76 : 28.
 - Vein of aqueduct of vestibule—76 : 29.
 - Vein of canaliculus of cochlea—76 : 30.

XI. Brain: General Characteristics, Meninges, Blood Vessels, and Cerebral Nerves

1. LARGER SUBDIVISIONS OF THE BRAIN.

For the removal of the brain see II: 2*a*. A demonstration of its structures can best be undertaken in a specimen which has been hardened in formalin. The following subdivisions of the brain may be identified by inspection without disturbing the meninges and blood vessels.

Encephalon—59: 10.

Rhombencephalon—59: 11.

Myelencephalon—59: 12.

Medulla oblongata—59: 13.

Metencephalon—60: 18.

Pons—60: 19.

Cerebellum—60: 53.

Cerebrum—61: 36.

Mesencephalon—61: 40.

Prosencephalon—62: 12.

Diencephalon—62: 13.

Cannot be favorably demonstrated in the intact brain.

Telencephalon—63: 5.

Subdivided into hemispheres—63: 6 separated by the longitudinal fissure of the cerebrum—63: 8.

2. MENINGES AND BLOOD VESSELS OF THE BRAIN.

Some of the following structures have already been listed in connection with the removal of the brain II: 1.

a. Meninges—65: 32.

Dura mater of brain—65: 33.

Falx cerebri—65: 34.

Tentorium cerebelli—65: 35.

Falx cerebelli—65: 36.

Diaphragma sellae—65: 37.

Foramen diaphragmatis—65: 38.

Incisura tentorii—65: 39.

Arachnoid of brain—65: 45.

Subarachnoid cavity—65: 46.

Subarachnoid cisterns—65: 47.

The structural characteristics of the subarachnoid cisterns may be demonstrated by making a median sagittal incision through the arachnoid membrane in the region of the anterior surface of the medulla oblongata and pons, and carefully reflecting the two flaps of the arachnoid laterally.

Cisterna cerebellomedullaris**—65: 48.

Cisterna fossae lateralis cerebri sylvii**—65: 49.

Cisterna chiasmatis**—65: 50.

Cisterna interpeduncularis**—65: 51.

Cisterna venae magnae cerebri**—65: 52.

Arachnoidal granulations—65: 53. (See also II: 1.)

Pia mater of the brain—65: 54.

b. Blood vessels of the brain.

Demonstrated by carefully removing the arachnoid membrane with scissors and forceps so far as this can be done without injuring or lacerating the brain itself.

Vertebral artery—48: 21.

Posterior spinal artery**—48: 23.

Anterior spinal artery**—48: 24.

Posterior inferior cerebellar artery—48: 26.

Basilar artery—48: 27.

Anterior inferior cerebellar artery—48: 28.

Internal auditory artery**—48: 29.

Pontine rami**—48: 30.

Superior cerebellar artery—48: 31.

Posterior cerebral artery—48: 32.

Arterial circle of willis—48: 33.

Internal carotid artery—47: 68.

Posterior communicating artery—48: 15.

Chorioid artery**—48: 16.

Anterior cerebral artery—48: 17.

Anterior communicating artery—48: 18.

Middle cerebral artery—48: 19.

Veins of the brain—53: 41.

For the sinuses of the dura mater, see II: 2*c*. The cerebral veins are tributaries of these sinuses. The deeper veins cannot be favorably demonstrated at the present stage of the dissection; the following veins are superficial in position:

Superior cerebral veins—53: 42.

Middle cerebral vein—53: 43.

Inferior cerebral veins—53: 44.

Superior cerebellar veins—53: 45.

Inferior cerebellar veins—53: 46.

Basal vein—53: 51.

3. BASE OF THE BRAIN AND THE CEREBRAL NERVES.

a. Base of the brain.

Exposed by removing (with a forceps and scissors) the remaining parts of meninges and blood vessels from the base of the brain, care being taken to guard against the tearing away of the cerebral nerves.

Cerebral peduncles—61: 46.

Optic chiasma—62: 36.

Optic tract—62: 33.

Interpenduncular fossa—61: 42.

Anterior recess**—61: 43.

Posterior recess**—61: 44.

Posterior perforated substance—61: 45.

Mamillary bodies—62: 26.

Tuber cinereum—62: 28.

Infundibulum—62: 29.

Longitudinal fissure of cerebrum—63: 8.

Lateral fissure of cerebrum—63: 16.

Pons—60: 19.

Medulla oblongata—59: 13.

b. Cerebral nerves.

Olfactory nerves—66: 3.

Optic nerve—66: 4.

Oculomotor nerve—66: 5.

Trochlear nerve—66: 9.

Trigeminal nerve—66: 11.

Portio major—66: 12.

Portio minor—66: 14.

Abducens nerve—67: 46.

Facial nerve—67: 47.

Intermediate nerve—67: 63.

Acoustic nerve—67: 65.

Vestibular root—67: 66.

Cochlear root—67: 67.

Glossopharyngeal nerve—68: 8.

Vagus nerve—68: 22.

Accessory nerve—68: 57.

Hypoglossal nerve—68: 60.

XII. Brain: Surface Anatomy of the Rhombencephalon and Mesencephalon

1. RHOMBENCEPHALON—59: 11.

To facilitate the exposure of structures in the rhombencephalon and mesencephalon the following incisions may be made for the removal of the right hemisphere of the cerebrum and the right half of the cerebellum: (*a*) with a sharp, thin knife make a transverse incision through the right cerebral peduncle just behind the right corpus mamillare; press apart the two cerebral hemispheres, expose the corpus callosum and beginning at the corpus callosum make a nearly median sagittal incision through all the structures in the middle line of the prosencephalon; the latter incision should preferably pass slightly to the left of the midline, leave the septum pellucidum attached to the right hemisphere, and then should be carried posteriorly until it meets the transverse incision just made through the cerebral peduncle, thus detaching the right cerebral hemisphere; (*b*) a second median sagittal incision is made through the vermis of the cerebellum, guarding against cutting into the floor of the fourth ventricle but carrying the incision forward through the anterior medullary velum as far as the inferior colliculi of the mesencephalon; finally by cutting through the brachium conjunctivum, brachium pontis and the corpus restiforme on the right, the right half of the cerebellum is detached (both the right cerebral hemisphere and the right half of the cerebellum being transferred to preserving fluid for later reference).

a. Medulla oblongata—59: 13.

Posterior median fissure—59: 14.

Anterior median fissure—59: 15.

Foramen caecum—59 : 16.
 Pyramid—59 : 17.
 Decussation of pyramids—59 : 18.
 Anterior lateral sulcus—59 : 19.
 Posterior lateral sulcus—59 : 20.
 Olive—59 : 21.
 Restiform body—59 : 22.
 Funiculus lateralis—59 : 23.
 Funiculus cuneatus—59 : 24.
 Tuberculum cinereum—59 : 25.
 Funiculus gracilis—59 : 26.
 Clava—59 : 27.
 External arcuate fibres—59 : 28.

b. Pons—60 : 19.

Basilar sulcus—60 : 20.
 Brachium pontis—60 : 23.

c. Isthmus of rhombencephalon—61 : 25.

Brachium conjunctivum—61 : 26.
 Lemniscus—61 : 27.
 Trigonum lemnisci—61 : 30.
 Anterior medullary velum—61 : 31.
 Frenulum of anterior medullary velum—61 : 32.

d. Cerebellum.

Gyri of the cerebellum—60 : 54.
 Sulci of the cerebellum—60 : 55.
 Vallecula cerebelli—60 : 56.
 Incisura cerebelli anterior—60 : 57.
 Incisura cerebelli posterior—60 : 58.
 Horizontal sulcus—60 : 59.
 Transverse fissure**—60 : 60.
 Vermis—60 : 61.
 Lingula cerebelli—60 : 62, 63.
 Central lobe—60 : 64.
 Monticulus—60 : 65.
 Culmen—60 : 66.
 Declive—60 : 67.
 Folium vermis—60 : 68.
 Tuber vermis—60 : 69.
 Uvula—60 : 71.
 Nodule—60 : 72.
 Hemisphere of cerebellum—60 : 73.
 Superior surface—60 : 14.
 Ala lobuli centralis—60 : 75.
 Lobulus quadrangularis—60 : 76.
 Pars anterior—60 : 77.
 Pars posterior—60 : 78.

- Lobulus semilunaris superior—61 : 1.
- Inferior surface—61 : 2.
- Lobulus semilunaris inferior—61 : 3.
- Lobulus biventer—61 : 4.
- Tonsil of cerebellum—61 : 5.
- Flocculus—61 : 6.

2. FOURTH VENTRICLE—59 : 58.

a. Floor of the fourth ventricle.

- Rhomboid fossa—59 : 59.
- Pars inferior [calamus scriptorius]—59 : 60.
- Pars intermedia—59 : 62.
- Lateral recess—59 : 63.
- Pars superior—59 : 64.
- Sulcus limitans—59 : 65.
- Fovea inferior—59 : 66.
- Fovea superior—60 : 1.
- Trigonum n. hypoglossi—60 : 2.
- Striae medullares—60 : 3.
- Eminentia medialis—60 : 4.
- Colliculus facialis—60 : 5.
- Ala cinerea—60 : 6.
- Area acustica—60 : 7.
- Locus caeruleus—60 : 8.

b. Roof of the fourth ventricle—60 : 9.

- Posterior medullary velum—60 : 10.
- Taenia ventriculi quarti—60 : 11.
- Obex—60 : 12.
- Epithelial chorioid layer—60 : 13.
- Median aperture [foramen of megendie]—60 : 14.
- Lateral aperture—60 : 16.
- Fastigium—60 : 17.

3. MESENCEPHALON—61 : 40.

For structures relative to the inferior surface of the mesencephalon—61 : 41-45, see XI : 3a.

- Cerebral peduncles—61 : 46.
- Aquaeductus cerebri—61 : 47.
- Sulcus lateralis—61 : 48.
- Sulcus n. oculomotorii—61 : 49.
- Quadrigeminal bodies—62 : 1.
- Lamina quadrigemina—62 : 2.
- Colliculus superior—62 : 3.
- Colliculus inferior—62 : 4.
- Brachium quadrigeminum superius—62 : 5.
- Brachium quadrigeminum inferius—62 : 6.

XIII. Brain: Surface Anatomy of the Prosencephalon

1. GENERAL SUBDIVISIONS OF THE PROSENCEPHALON.

The remaining cerebral hemisphere may be detached by carefully cutting through the left cerebral peduncle just posterior to the left mamillary body, the rhombencephalon and mesencephalon being transferred to preserving fluid for later reference.

Prosencephalon—62: 12.

Diencephalon—62: 13.

Thalamencephalon—62: 51.

Pars mammillaris hypothalami—62: 25.

Telencephalon—63: 5.

Hemisphere—63: 6.

Pars optica hypothalami—62: 27.

2. TELENCEPHALON.

a. Pallium: general characteristics.

Longitudinal fissure of cerebrum—63: 8.

Transverse fissure of cerebrum—63: 9.

Sulci of the cerebrum—63: 13.

Gyri of the cerebrum—63: 10.

Gyri profundi—63: 11.

Gyri transitivi—63: 12.

Gray substance—58: 5.

White substance—58: 4.

Petrosal impression—63: 14.

Lateral cerebral fossa—63: 15.

Lateral cerebral fissure sylvian—63: 16.

Posterior ramus—63: 17.

Ascending anterior ramus—63: 18.

Horizontal anterior ramus—63: 19.

The pallium as a whole is subdivided into the following lobes and related fissures and sulci:

Lateral cerebral fissure [Sylvian]—63: 16.

Central sulcus—63: 30.

Parieto-occipital fissure—64: 12.

Collateral fissure—63: 60.

Circular sulcus—63: 25.

Frontal lobe—63: 33.

Temporal lobe—63: 50.

Occipital lobe—63: 63.

Parietal lobe—63: 70.

Insula—63: 21.

b. Lobes of the cerebrum.

Frontal lobe—63: 33.

Frontal pole—63: 34.

Anterior central gyrus—63: 31.

Precentral sulcus—63: 35.

- Superior frontal gyrus—63 : 36.
- Superior frontal sulcus—63 : 37.
- Middle frontal gyrus—63 : 38.
 - Pars superior—63 : 39.
 - Pars inferior—63 : 40.
- Inferior frontal sulcus—63 : 41.
- Inferior frontal gyrus—63 : 42.
 - Pars opercularis—63 : 43.
 - Pars triangularis—63 : 44.
 - Pars orbitalis—63 : 45.
- Straight gyrus—63 : 46.
- Olfactory sulcus—63 : 47.
- Orbital gyri—63 : 48.
- Orbital sulci—63 : 49.
- Parietal lobe—63 : 70.
 - Posterior central gyrus—63 : 32.
 - Superior parietal lobule—63 : 71.
 - Interparietal sulcus—63 : 72.
 - Inferior parietal lobule—63 : 73.
 - Supramarginal gyrus—63 : 74.
 - Angular gyrus—63 : 75.
- Temporal lobe—63 : 50.
 - Temporal pole—63 : 51.
 - Transverse temporal sulci—63 : 52.
 - Transverse temporal gyri—63 : 53.
 - Superior temporal gyrus—63 : 54.
 - Superior temporal sulcus—63 : 55.
 - Middle temporal gyrus—63 : 56.
 - Middle temporal sulcus—63 : 57.
 - Inferior temporal gyrus—63 : 58.
 - Inferior temporal sulcus—63 : 59.
 - Collateral fissure—63 : 60.
 - Fusiform gyrus—63 : 61.
 - Lingual gyrus—63 : 62.
- Occipital lobe—63 : 63.
 - Occipital pole—63 : 64.
 - Transverse occipital sulcus—63 : 65.
 - Superior occipital gyri—63 : 66.
 - Superior occipital sulci—63 : 67.
 - Lateral occipital gyri—63 : 68.
 - Lateral occipital sulci—63 : 69.
- Insula—63 : 21.
 - Operculum—63 : 26.
 - Pars frontalis—63 : 27.
 - Pars parietalis—63 : 28.
 - Pars temporalis—63 : 29.
 - Gyri insulae—63 : 22.

Exposed by pulling apart the margins of the lateral fissure, cutting away a part of the operculum if necessary.

- Gyrus longus insulae—63 : 23.
- Gyrus breves insulae—63 : 24.
- Sulcus centralis—63 : 30.
- Sulcus circularis—63 : 25.

c. Medial surface of the hemisphere—63 : 76.

- Sulcus corporis callosi—63 : 77.
- Sulcus cinguli—63 : 78.
- Pars subfrontalis—63 : 79.
- Pars marginalis—64 : 1.
- Sulcus subparietalis—64 : 2.
- Fissura hippocampi—64 : 3.
- In the fissura hippocampi the fascia dentata hippocampi—64 : 56,
 and the fimbria hippocampi—64 : 53, may be observed.
- Gyrus fornicatus—64 : 4.
- Gyrus cinguli—64 : 5.
- Isthmus gyri fornicati—64 : 6.
- Gyrus hippocampi—64 : 7.
- Uncus—64 : 8.
- Substantia reticularis alba—64 : 9.
- Lobulus paracentralis—64 : 10.
- Praecuneus—64 : 11.
- Fissura parietooccipitalis—64 : 12.
- Fissura calcarina—64 : 13.
- Cuneus—64 : 14.

d. Rhinencephalon—64 : 58.

- Sulcus parolfactorius anterior—64 : 59.
- Pars anterior—64 : 60.
- Lobus olfactorius—64 : 61.
- Bulbus olfactorius—64 : 62.
- Tractus olfactorius—64 : 63.
- Trigonum olfactorium—64 : 64.
- Stria medialis—64 : 65.
- Stria intermedia—64 : 66.
- Area parolfactoria—64 : 67.
- Sulcus parolfactorius posterior—64 : 68.
- Pars posterior—64 : 69.
- Gyrus subcallosus—64 : 70.
- Substantia perforata anterior—64 : 71.
- Stria olfactoria lateralis—64 : 72.
- Limen insulae—64 : 73.

e. Hypothalamus—62 : 24.

- Pars optica hypothalami—62 : 27.
- Only the optic part of the hypothalamus is in relation to the
 telencephalon; the mamillary part—62 : 25 includes the corpus
 mamillare—62 : 26.

- Tuber cinereum—62: 28.
- Infundibulum—62: 29.
- Hypophysis—62: 30.
 - Lobus anterior—62: 31.
 - Lobus posterior—62: 32.
- Tractus opticus—62: 33.
 - Radix medialis—62: 34.
 - Radix lateralis—62: 35.
- Chiasma opticum—62: 36.
- Lamina terminalis—62: 37.

f. Corpus callosum—64: 15.

The corpus callosum may be demonstrated by slicing off the upper part of the right hemisphere at the level of the sulcus cinguli (incidentally exposing the centrum semiovale—64: 76), cutting transversely through the middle of the gyrus cinguli and carefully tearing away the anterior and posterior parts of the gyrus cinguli, exposing at the same time parts of the radiatio corporis callosi—65: 6-11, and the cingulum—65: 2.

- Splenium corporis callosi—64: 16.
- Truncus corporis callosi—64: 17.
- Genu corporis callosi—64: 18.
- Rostrum corporis callosi—64: 19.
- Lamina rostralis—64: 20.
- Striae transversae—64: 21.
- Stria longitudinalis medialis—64: 22.
- Stria longitudinalis lateralis—64: 23.
- Fasciola cinerea—64: 24.

g. Ventriculus lateralis—64: 35.

The lateral ventricle may be exposed by making the following dissections: (a) making a longitudinal incision through the corpus callosum about 1 cm. from the medial sagittal plane, reflect lateralward and detach the part of the corpus callosum lateral from the incision, taking care to leave *in situ* the part of the corpus callosum medial to the incision and the pars occipitalis of the radiatio corporis callosi—65: 10; (b) cutting backward and lateralward through the medullary substance forming the roof of the ventricular cavity, remove enough of the roof to expose the interior of the central part of the cavity; (c) to open the inferior cornu extend the preceding incision downward and forward through the lateral part of the temporal lobe toward the temporal pole, following the course of the cavity (which lies nearly parallel to the superior temporal sulcus), and remove the part of the temporal lobe superior to this incision together with the pars temporalis of the operculum—63: 26, guarding the insula from injury.

- Cornu anterius—64: 37.
- Caput nuclei caudati—64: 42.
- Pars centralis—64: 36.
 - Nucleus caudatus—64: 41.
 - Stria terminalis—64: 44.
 - Terminal vein—53: 50.

Lamina affixa—64: 45.

Lamina chorioidea epythelialis—64: 47.

Plexus chorioideus ventriculi lateralis—65: 62.

Taenia chorioidea—64: 46.

Thalamus—62: 52.

Largely covered by the chorioid plexus.

Taenia fornicis—64: 28.

Cornu posterius—64: 38.

Tapetum—65: 11.

With reference only to the roof and lateral wall of the posterior cornu.

Calcar avis—64: 48.

(Bulbus cornu posterioris)—64: 49.

Cornu inferius—64: 39.

The mutual relations of the inferior cornu and the insula may be more thoroughly examined by insinuating the fingers beneath the pars frontalis and pars parietalis of the operculum—63: 27, 28, and carefully tearing away the cortex in an upward direction. The following two structures are in relation to the inferior wall:

Eminentia collateralis—64: 50. (Sometimes absent.)

Trigonum collaterale—64: 51.

The following structures are in relation to the lateral and superior walls of the inferior cornu:

Tapetum—65: 11.

Nucleus amygdalae—65: 21.

Stria terminalis—64: 44.

Cauda nuclei caudati—64: 43.

In relation to the medial wall the following structures may be observed:

Hippocampus—64: 52.

Digitationes hippocampi—64: 55.

Fimbria hippocampi—64: 53.

Chorioid plexus—65: 62.

Taenia fimbriae—64: 54.

h. Septum pellucidum, fornix, and tela chorioidea.

The septum pellucidum and fornix may be exposed by cutting through the occipital part of the radiation of the corpus callosum (of the right hemisphere) and through the fimbria hippocampi at the point where it passes into the crus fornicis, then carrying the knife anteriorly from the anterior end of the inferior horn, above the level of the uncus, through the temporal pole, separating the temporal lobe, together with the hippocampal gyrus medial to it, from the remainder of the brain along the line of the transverse fissure of the cerebrum; finally paring away enough of the cut edge of the medial part of the corpus callosum necessary to satisfactorily demonstrate the septum pellucidum and fornix.

Septum pellucidum—64: 32.

Lamina septi pellucidi—64: 33.

Cavum septi pellucidi—64: 34.

Exposed by cutting through the remaining medial part of the corpus callosum just posterior to the genu, carefully detaching it from the septum pellucidum and fornix, and separating the two laminae of the septum.

Fornix—64: 25.

Crus fornicis—64: 26.

Corpus fornicis—64: 27.

Taenia fornicis—64: 28.

Columna fornicis—64: 29.

Pars libera columnae fornicis—64: 30.

Pars tecta columnae fornicis—64: 31.

Tela chorioidea ventriculi tertii—65: 60.

Exposed by cutting transversely through the middle of the corpus fornicis, carefully raising the two parts of the fornix and reflecting them anteriorly and posteriorly, noting the commissura hippocampi—64: 57, situated between the crura of the fornix.

Internal cerebral veins—53: 47.

Vein of septum pellucidum—53: 49.

Terminal vein—53: 50.

Chorioid vein—53: 52.

Plexus chorioideus ventriculi lateralis—65: 62.

Glomus chorioideum—65: 63.

Plexus chorioideus ventriculi tertii—65: 61.

Exposed by dividing the terminal vein at its junction with the internal cerebral vein, seizing the apex of the tela chorioidea and pulling it backward exposing the cavity of the third ventricle, but guarding against injury to the attachments of the corpus pineale—62: 62.

2. THALAMENCEPHALON—62: 51.

a. *Thalamus*—62: 52.

Pulvinar—62: 53.

Tuberculum anterius thalami—62: 54.

Taenia thalami—62: 55.

Stria medullaris—62: 56.

Lamina chorioidea epithelialis—62: 57.

b. *Metathalamus*—62: 58.

Corpus geniculatum mediale—62: 59.

Corpus geniculatum laterale—62: 60.

c. *Epithalamus*—62: 61.

Corpus pineale—62: 62.

Recessus pinealis—62: 63.

Recessus suprapinealis—62: 64.

Habenula—62: 65.

Commissura habenularum—62: 66.

Trigonum habenulae—62: 67.

3. VENTRICULUS TERTIUS—82: 14.

- Aditus ad aquaeductum cerebri—62: 15.
- Commissura posterior—62: 16.
- Foramen ventriculare—62: 17.
- Sulcus hypothalamicus—62: 18.
- Massa intermedia—62: 19.
- Recessus opticus—62: 20.
- Recessus infundibuli—62: 21.
- Commissura anterior—62: 22.
- Recessus triangularis—62: 23.

XIV. Brain: Sections through the Brain

The majority of the structures to be observed in stained and unstained sections of the brain require a hand lens or microscope for their demonstration. These structures have not been repeated in detail here, since they are given complete in Part II, as originally listed in the B N A.

1. STRUCTURES IN SECTIONS OF THE MEDULLA OBLONGATA—59: 29-57.

Exposed in transverse sections made at (*a*) the level of the decussation of the pyramids; (*b*) between the decussation of the pyramids and the olives; and (*c*) through the middle of the olives.

2. STRUCTURES IN SECTIONS OF THE PONS—60: 24-52.

May be demonstrated in transverse sections made at (*a*) about the junction of the pons and medulla, passing through point of entrance of the acoustic nerve; (*b*) at the level of the roots of the facial and abducens nerves; (*c*) at the level of the roots of the trigeminal nerves, and (*d*) through the anterior medullary velum and the middle of the pons.

3. STRUCTURES IN SECTIONS OF THE CEREBELLUM—61: 10-24.

May be demonstrated in the following sections: (*a*) a median sagittal section through the vermis; (*b*) a frontal section through about the middle of one half the cerebellum; and (*c*) a horizontal section through the other half of the cerebellum in the plane of the brachium conjunctivum.

4. STRUCTURES IN SECTIONS OF THE RHOMBENCEPHALIC ISTHMUS AND THE MESENCEPHALON.

May be demonstrated in transverse sections made (*a*) through the inferior colliculus at the level of the nucleus of the trochlear nerve; and (*b*) through the superior colliculus and lateral geniculate body at the level of the roots of the oculomotor nerve and the nucleus ruber.

- a. Sections of the isthmus rhombencephali*—61: 33-35.
- b. Sections of the pedunculus cerebri*—61: 50-65.
- c. Sections of the corpora quadrigemina*—62: 7-11.

5. STRUCTURES IN SECTIONS THROUGH THE PROSENCEPHALON.

For the demonstration of these structures, horizontal sections about $\frac{1}{2}$ to 1 cm. thick should be made through the remainder of the right cerebral hemisphere. In the left hemisphere, which should have been retained intact, either vertical frontal or obliquely frontal sections may be made.

The *vertical frontal* sections should pass through the following regions: (*a*) through the genu of the corpus callosum; (*b*) through the septum

pellucidum between the body and rostrum of the corpus callosum; (c) through the tips of the temporal lobes; (d) through the foramen interventriculare; (e) through the corpora mamillaria; (f) through the subthalamic region; (g) through the upper end of the aqueductus cerebri.

The *obliquely frontal* sections should all be parallel to the sulcus centralis and pass through the following regions (in accordance with the method of Pitris, 1877): (a) through the lobus frontalis about 5 cm. anterior to the sulcus centralis; (b) through the pars opercularis of the gyrus frontalis inferior and the corresponding portions of the gyrus medius and gyrus frontalis superior; (c) through the middle of the gyrus centralis anterior; (d) through the middle of the gyrus centralis posterior; (e) through the anterior ends of the lobulus parietalis superior and lobulus parietalis inferior; (f) through the posterior part of the cerebrum about 1 cm. anterior to the fissura parietooccipitalis.

In addition to the preceding horizontal and frontal sections, the following sections are especially instructive: (a) through the brain in a plane passing parallel to the course of the brachia conjunctiva and through them; and (b) through the brain in a plane parallel to the course of the cerebral peduncles and through them.

a. *Sections of the hypothalamus*—62: 38–50.

b. *Sections of the thalamencephalon*—62: 68–73, 63: 1–4.

c. *Sections of the telencephalon*—64: 74–77, 65: 1–31.

XV. Organ of Vision

1. OPTIC NERVE—73: 4. (See also X: 10b.)

Vaginae n. optici—73: 5.

Spatia intervaginalis—73: 6.

2. BULBUS OCULI—73: 7.

As a rule, the ordinary cadaver material is not favorable for the present purpose and must consequently be supplemented by eyeballs obtained from the ox or pig, in which the various structures may be demonstrated in both fresh specimens and in material hardened in formalin. The conjunctiva and fascia bulbi are caught with a forceps, cut through close to and entirely around the cornea, and these structures, together with any other soft parts, removed from the surface of the sclera, and two hardened eyeballs cut into halves, the one by a sagittal, and the other by a coronal, section.

Anterior pole—73: 8.

Posterior pole—73: 9.

Equator—73: 10.

Meridians—73: 11.

External axis of eyeball—73: 12.

Internal axis of eyeball—73: 13.

Optic axis—73: 14.

[Line of vision]—73: 15.

Ophthalmic vesicle*—73: 16.

Ophthalmic cup*—73: 17.

3. TUNICA FIBROSA OCULI—73: 18.

a. *Sclera*—73: 19.

May be exposed by cutting through the sclera at the equator with a sharp knife and with scissors carrying the incision completely around the eyeball along the line of the equator (carefully guarding against injury to the black chorioid coat); separating both parts of

the sclera from the subjacent structures and reflecting the anterior part forward, breaking the attachment of the ciliary muscle to its deep surface, and separating the posterior part by dividing the fibers of the optic nerve in a plane corresponding to the inner surface of the sclera.

Sulcus sclerae—73: 20.

Rima cornealis—73: 21.

Sinus venosus sclerae—73: 22.

Lamina fusca—73: 23.

Lamina cribrosa sclerae—73: 24.

(Raphe sclerae)—73: 25.

(Funiculus sclerae)—73: 26.

b. Cornea—73: 27.

Annulus conjunctivae—73: 28.

Vertex corneae—73: 29.

Limbus corneae—73: 30.

Facies anterior—73: 31.

Facies posterior—73: 32.

The following structures can be adequately demonstrated only in thin sections by means of a hand lens and microscope.

Epithelium corneae—73: 33.

Lamina elastica anterior—73: 34.

Substantia propria—73: 35.

Lamina elastica posterior—73: 36.

Endothelium camerae anterioris—73: 37.

4. TUNICA VASCULOSA OCULI—73: 38.

a. Chorioidea—73: 39.

Lamina suprachorioidea—73: 40.

Spatium perichorioideale—73: 41.

Lamina vasculosa—73: 42.

The vorticosae veins—53: 60, may be exposed by brushing away the pigment with a camel's-hair brush.

Lamina choriocapillaris—73: 43.

Lamina basalis—73: 44.

(Raphe chorioideae)—73: 45.

b. Corpus ciliare—73: 46.

Corona ciliaris—73: 47.

May be demonstrated by making a coronal section through an eyeball slightly anterior to the equator and carefully removing the vitreous humor from the anterior segment of the eyeball.

Processus ciliares—73: 48.

Plicae ciliares—73: 49.

Orbicularis ciliaris—73: 50.

Ciliary muscle—73: 51.

The following fibers require a microscope for their adequate demonstration:

Fibrae meridionales—73: 52.

Fibrae circulares—73: 53.

Plexus gangliosus ciliaris—73: 54.

c. Iris—73 : 55.

May be exposed by cutting around the sclerocorneal junction and removing the cornea, making several meridional incisions through the anterior part of the sclera; the strips of sclera may then be separated from the ciliary muscle, bent aside and pinned to the bottom of a cork-lined tray filled with water, the iris examined and then removed for a more complete demonstration of its structure.

Margo pupillaris—73 : 56.

Margo ciliaris—73 : 57.

Facies anterior—73 : 58.

Facies posterior—74 : 1.

Annulus iridis major—74 : 2.

Annulus iridis minor—74 : 3.

Plicae iridis—74 : 4.

Pupilla—74 : 5.

Sphincter muscle of pupil—74 : 6.

Stroma iridis—74 : 7.

Dilator muscle of pupil—74 : 8.

Pectinate ligament of iris—74 : 9.

Spatia anguli iridis—74 : 10.

Greater arterial circle—74 : 11.

Lesser arterial circle—74 : 12.

(Membrana pupillaris)*—74 : 13.

d. Ciliary nerves and vessels.

Short ciliary nerves—66 : 37.

Long ciliary nerves—66 : 25.

Short posterior ciliary arteries—47 : 75.

Long posterior ciliary arteries—47 : 76.

Anterior ciliary arteries—48 : 1.

Venae vorticosae—53 : 60.

5. PIGMENT LAYER—74 : 14.

May be exposed by removing the chorioidea under water.

Stratum pigmenti retinae—74 : 15.

Stratum pigmenti corporis ciliaris—74 : 16.

Stratum pigmenti iridis—74 : 17.

6. RETINA—74 : 18.

May be exposed by removing the chorioidea from the eyeball from which the sclera and cornea have already been taken away.

Pars optica retinae—74 : 19.

Ora serrata—74 : 20.

Pars ciliaris retinae—74 : 21.

Papilla n. optici—74 : 22.

Excavatio papillae n. optici—74 : 23.

Macula lutea—74 : 24.

Fovea centralis—74 : 25.

Vasa sanguinea retinae—74 : 26-34.

May be examined in the living eye with the ophthalmoscope.

7. VITREOUS BODY—74: 38.

May be obtained from an eyeball which has been kept for several days without preservatives, by dividing the coats of the eye at the equator, carefully turning back the cut edges and allowing the "eye-kernel" (vitreous body and crystalline lens) to slip out into a vessel of water; the demonstration of the hyaloid membrane, capsule of the lens, and the zonula ciliaris may also be facilitated by staining for a few minutes in strong picrocarmin solution and washing in water.

Hyaloid artery*—74: 39.

Canalis hyaloidea—74: 40.

Fossa hyaloidea—74: 41.

Membrana hyaloidea—74: 42.

Stroma vitreum—74: 43.

Humor vitreus—74: 44.

8. ZONULA CILIARIS—74: 59.

Fibrae zonulares—74: 60.

Spatia zonularia—74: 61.

Their structural characteristics may be demonstrated by inserting the point of a fine blowpipe into the spaces and inflating them with air.

9. CRYSTALLINE LENS—74: 45.

Isolated for observation by cutting through the zonular fibers of the zonula ciliaris and removing the lens.

Capsula lentis—74: 51.

Polus anterior lentis—74: 52.

Polus posterior lentis—74: 53.

Facies anterior lentis—74: 54.

Facies posterior lentis—74: 55.

Axis lentis—74: 56.

Aequator lentis—74: 57.

Radii lentis—75: 58.

Substantia lentis—74: 46.

Exposed by cutting through the anterior wall of the capsule and pressing the lens out through the opening.

Substantia corticalis—74: 47.

Nucleus lentis—74: 48.

With the aid of a microscope the following structures may be demonstrated in a lens which has been hardened in alcohol and teased apart.

Fibrae lentis—74: 49.

Epithelium lentis—74: 50.

10. CHAMBERS OF THE EYEBALL.

Camera oculi anterior—74: 35.

Angulus iridis—74: 36.

Camera oculi posterior—74: 37.

ABDOMEN AND PELVIS

PLATE 7

Male perineum showing relations and surface projection of the inferior pelvic aperture as seen in the lithotomy position.

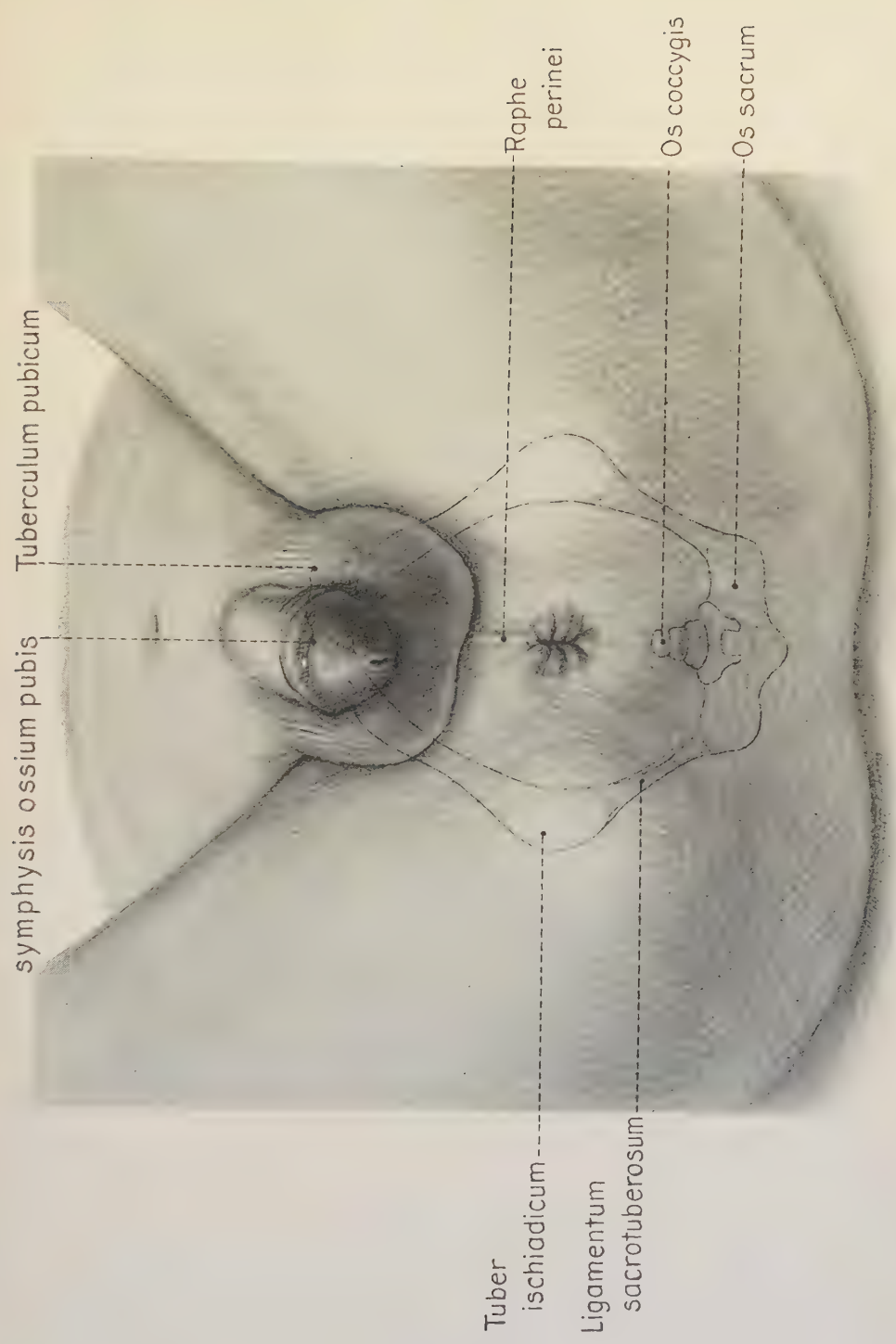


PLATE 8

Female perineum showing relations and surface projection of the inferior pelvic aperture as seen in the lithotomy position.

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Tuber

ischiadicum

Ligamentum

sacrotuberosum

Raphe

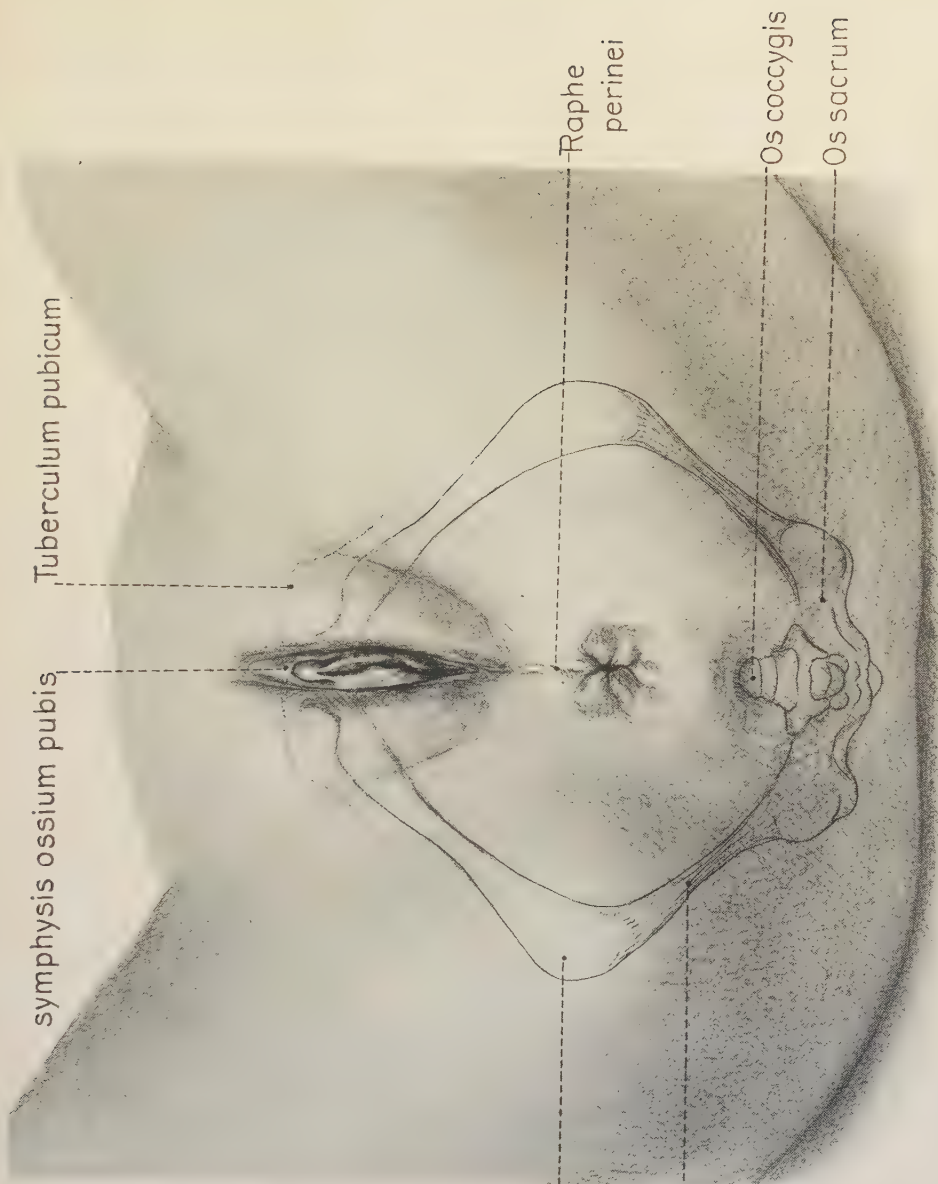
perinei

Os coccygis

Os sacrum

symphysis ossium pubis

Tuberculum pubicum



ABDOMEN AND PELVIS

I. General Characteristics

1. SUBDIVISIONS OF ABDOMEN AND PELVIS.

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Abdomen—4: 55.

Abdominal cavity—4: 56.

Scrobiculus cordis—4: 57.

Umbilicus—4: 58.

Flank (or side)—4: 59.

Loin—4: 60.

Groin—4: 61.

Pelvis—5: 1.

Pelvic cavity—5: 2.

Mons pubis—5: 3.

Hip—5: 4.

Buttock—5: 5.

Anus—5: 6.

Anal cleft—5: 7.

Perineum—5: 8.

2. SURFACE ANATOMY. (Pls. 3, 4, 7, 8.)

Xiphoid process—7: 52.

Ribs—7: 28. (Anterior ends of 7th to 12th ribs.)

Iliac crest—15: 18.

Posterior superior iliac spine—15: 24.

Crista sacralis media—7: 18.

Anterior superior iliac spine—15: 22.

Inguinal ligament—25: 41.

Superior ramus of the pubic bone—15: 50.

Symphysis pubis—15: 53.

Pubic tubercle—15: 44.

Linea alba—25: 34.

Linea semilunaris—25: 49.

Subcutaneous inguinal ring—25: 44.

Spermatic cord—40: 37.

Round ligament of the uterus—42: 23.

Tuber ischiadicum—15: 36. lower end of

Inferior ramus of the ischium—15: 35.

3. REGIONS. (Pls. 11, 12, and figs. 2, 3. May be outlined on the skin with pencil or crayon.)

Epigastric region—83: 15.

Hypochondriac region—83: 16.

Mesogastric region—83: 17.

Umbilical region—83: 18.

Lateral abdominal region—83: 19.

Hypogastric region—83: 20.

Pubic region—83 : 21.

Inguinal region—83 : 22.

Regions of the back in relation to the pelvis:

Perineal region—83 : 33.

Anal region—83 : 34.

Urogenital region—83 : 35.

Pudendal region—83 : 36.

II. Perineal Region⁵

1. SURFACE ANATOMY. (Pls. 7, 8.)

a. *Perineal region in general.*

Symphysis pubis—15 : 53.

Arcuate ligament—20 : 61.

Coccyx—7 : 25.

Inferior ramus of the pubis—15 : 49.

Inferior ramus of the ischium—15 : 35.

Sacrotuberous ligament—20 : 49.

Perineal raphe—43 : 18.

b. *Pudendal region in the male.*

Corpus penis—40 : 68.

Dorsum of penis—40 : 70.

Urethral surface—40 : 71.

Glans penis—40 : 72.

Corona glandis—40 : 73.

Septum glandis—40 : 74.

Collum glandis—40 : 75.

Prepuce—41 : 1.

Frenulum of prepuce—41 : 2.

External urethral orifice—41 : 28.

Scrotum—41 : 31.

Raphe of scrotum—41 : 32.

c. *Pudendal region in the female.*

Female pudendum—42 : 45.

Mons pubis—5 : 3.

Labium majus pudendi—42 : 46.

Anterior labial commissure—42 : 47.

Posterior labial commissure—42 : 48.

Frenulum of pudendal labia—42 : 49.

Rima pudendi—42 : 50.

Fossa navicularis—42 : 51.

Labium minus pudendi—42 : 52.

Vestibulum vaginae—42 : 53.

Orificium vaginae—42 : 57.

Clitoris—42 : 59.

Corpus clitoris—42 : 61.

⁵ For some purposes it may be an advantage to consider this region in more direct correlation with the pelvic structures; see Section VI : 2.

- Glans clitoridis—42: 62.
~~Frenulum~~ of clitoridis—42: 63. *frenula*
 Prepuce of clitoridis—42: 64.
 External orifice of urethra—42: 71.
 Hymen—42: 29.
 Hymen caruncles—42: 30.

2. UROGENITAL REGION: STRUCTURES EXTERNAL TO THE UROGENITAL DIAPHRAGM.

a. In the male.

Skin incisions (the body being in the lithotomy position); (a) transversely between the anterior extremities of the ischial tuberosities; (b) median along the median raphe from the scrotum to the tip of the coccyx, encircling the anus.

Superficial perineal fascia—43: 45. *340, 486, 489*

The following structures in the compartment between the superficial perineal fascia and the urogenital diaphragm are exposed by making an incision through the deeper layer of the superficial perineal fascia, beginning in the median line at the base of the scrotum and extending to the ischial tuberosity on each side, and reflecting the fascial flaps.

Superficial transverse perineal muscle—43: 42. *487*

260 Ischiocavernosus muscle—43: 43.

Bulbocavernosus muscle—43: 44.

Perineal artery—51: 19. *945*

Posterior scrotal arteries—51: 20.

Perineal nerve—71: 21. *766 supplies root of penis, iliohypogastric*

Posterior scrotal nerves—71: 22.

Perineal rami of the posterior femoral cutaneous nerve—70: 53.

Lymphatic vessels.

Root of penis—40: 67. *Bulb, 2 Cu*

Crura of penis—40: 69. *Valer*

Corpora cavernosa penis—41: 4.

The following structures are exposed by dividing the bulbocavernosus muscle in the midline and reflecting the muscle.

Corpus cavernosum urethrae—41: 5.

Bulbus urethrae—41: 6.

Hemispheres of bulb of urethra—41: 7.

Septum of bulb of urethra—41: 8.

b. In the female.

Skin incisions (the body being in the lithotomy position): (a) transversely between the ischial tuberosities; (b) along the median line extending from the mons pubis to the tip of the coccyx, encircling the labia majora and the anal orifice.

Superficial perineal fascia—43: 45.

Perineal artery—51: 19.

Posterior labial arteries—51: 21.

Perineal nerve—71: 21.

Posterior labial nerves—71: 23.

veins - 912

Perineal rami of the posterior femoral cutaneous nerve—70:53.

Lymphatic vessels.

Superficial transverse perineal muscle—43:42. (Not constant in degree of development.)

Ischiocavernosus muscle—43:43.

Bulbocavernosus muscle—43:44.

The following structures are exposed by reflecting the bulbocavernosus and ischiocavernosus muscles.

Bulbus vestibuli—42:54.

Glandula vestibularis major—42:58.

Crura clitoridis—42:60.

Corpus clitoridis—42:61.

Corpora cavernosa clitoridis—42:66.

Septum corporum cavernosorum—42:67.

Fascia clitoridis—42:68.

Glans clitoridis—42:62.

3. UROGENITAL DIAPHRAGM.

a. Inferior fascia of the urogenital diaphragm—43:37.

May be exposed by detaching the ischiocavernosus muscle and the crus penis (the crus clitoridis in the case of the female) from the pubic arch on each side; guarding against injury to the inferior fascia of the urogenital diaphragm, branches of the internal pudendal artery and the dorsal nerve of the penis (or of the clitoris in the female).

The inferior fascia of the urogenital diaphragm is removed in exposing the following structures situated in the compartment between the inferior and the superior fascia of the urogenital diaphragm.

b. Structures in the urogenital diaphragm in the male.

Transverse perinei profundus muscle—43:34.

Sphincter urethrae membranaceae muscle—43:35.

Artery of the penis—51:22.

Artery of the bulb of urethra—51:24.

Urethral artery—51:23.

Deep artery of penis—51:26.

Dorsal artery of penis—51:27.

Dorsal vein of the penis—55:49.

Dorsal nerve of the penis—71:24.

Bulbourethral glands—40:62.

Body of gland—40:63.

Excretory duct—40:64.

Membranous part of urethra—41:24.

Superior fascia of urogenital diaphragm—43:36.

The following structures are in relationship to this fascia:

Arcuate ligament of the pubis—20:61.

Transverse ligament of the pelvis—43:38.

c. Structures in the urogenital diaphragm in the female.

- Transverse perinei profundus muscle—43 : 34.
- Sphincter urethrae membranaceae muscle—43 : 35.
- Artery of clitoris—51 : 28.
- Artery of bulb of vestibule—51 : 25.
- Urethral artery—51 : 23.
- Deep artery of clitoris—51 : 29.
- Dorsal artery of clitoris—51 : 30.
- Dorsal veins of the clitoris—55 : 51.
- Dorsal nerve of the clitoris—71 : 25.
- Glandula vestibularis major—42 : 58.
- Urethra—42 : 70.
- Superior fascia of the urogenital diaphragm—43 : 36.
- The following structures are in relationship to this fascia :
 - Arcuate ligament of the pubis—20 : 61.
 - Transverse ligament of the pelvis—43 : 38.

4. ANAL REGION.

- Superficial perineal fascia—43 : 45.
- Sphincter ani externus muscle—43 : 24.
- Anococcygeal ligament—43 : 25.
- Inferior clunial nerve**—70 : 52.
- Perineal branch of the posterior femoral cutaneous nerve**—70 : 53.
- Ischiorectal fossa—43 : 41.
- The fat in the ischiorectal fossa is removed in the demonstration of its contents.
- Inferior haemorrhoidal nerve—71 : 20.
- Inferior haemorrhoidal veins—55 : 56.
- Inferior haemorrhoidal artery—51 : 18.
- The following structures are in relationship to the walls of the fossa :
 - Inferior fascia of pelvic diaphragm—43 : 32.
 - Levator ani muscle—43 : 21.
 - Obturator fascia—43 : 40.
 - The following nerve and artery are in relation to the obturator fascia :
 - Pudendal nerve—71 : 19.
 - Internal pudendal artery—51 : 17.
- Tendinous arch of the levator ani muscle—43 : 22.
- Situated at the angle of junction between the obturator fascia and the inferior fascia of the pelvic diaphragm.
- Obturator internus muscle—26 : 72.
- Urogenital diaphragm—43 : 33. (Its posterior margin only.)
- Glutaeus maximus muscle—26 : 67. (Its posterior or distal margin only.)
- Sacroterous ligament—20 : 49.

III. Anterior Abdominal Wall

1. FASCIA, CUTANEOUS NERVES AND BLOOD VESSELS.

For the surface anatomy of the abdomen, see I: 2, and plates 3 and 4. Skin incisions: (a) longitudinally along the anterior median line from the xiphoid process to the mons pubis (encircling the umbilicus); (b) from the xiphoid process transversely around the thorax as far back as possible; (c) from the mons pubis laterally along the line of the inguinal ligament to the anterior superior iliac spine and then posteriorly along the iliac crest as far back as possible. In demonstrating the following structures the dissection should not extend distal to the inguinal ligament and care taken not to disturb the subcutaneous inguinal ring and the contents of the inguinal canal.

Superficial fascia—23: 36.

Divided into two layers toward the inferior part of the abdomen.

Anterior cutaneous rami of intercostal nerves—70: 8.

Anterior cutaneous ramus of iliohypogastric nerve—70: 28.

Ilioinguinal nerve—70: 29.

Lateral cutaneous rami of intercostal nerves—70: 3.

Lateral cutaneous ramus of the iliohypogastric nerve—70: 27.

Superficial epigastric artery—51: 39.

Superficial circumflex iliac artery—51: 40.

External pudendal arteries—51: 41.

Parumbilical veins—55: 36.

Thoracoepigastric veins—54: 32.

Superficial epigastric vein—55: 65.

2. DEEPER STRUCTURES OF THE ANTERIOR ABDOMINAL WALL.

a. Muscles and related structures.

Obliquus externus abdominis muscle—25: 29.

Exposed by the removal of the deep fascia, guarding at the same time against injury to its aponeurosis and the structures in relation to the subcutaneous inguinal ring.

The following structures are in relationship with the external oblique muscle:

Trigonum lumbale—25: 48.

Inguinal ligament—25: 41.

Lacunar ligament—25: 42.

Subcutaneous inguinal ring—25: 44.

Superior crus—25: 45.

Inferior crus—25: 46.

Intercrural fibers—25: 47.

Obliquus internus abdominis muscle—25: 29.

May be exposed by detaching the external oblique muscle at its origin, dividing the muscle at its insertion into the iliac crest and from the superior iliac spine, carrying the incision medialward through the aponeurosis of the external oblique muscle to the lateral margin of the rectus abdominis muscle, and reflecting the external oblique muscle medialward.

Cremasteric muscle—25: 30.

Transversus abdominis muscle—25: 31.

May be exposed by detaching the internal oblique muscle at its origin and reflecting the muscle toward its insertion, at the same time guarding the subjacent nerves and vessels, and leaving intact the inguinal canal and its contents.

Linea semilunaris—25: 49.

The following nerves and vessels are in relationship throughout part of their course with the internal oblique and transversus abdominis muscles.

Anterior rami of thoracic nerves—70: 1.

Iliohypogastric nerve—70: 25.

Ilioinguinal nerve—70: 29.

Intercostal arteries—49: 59.

Lumbar arteries—50: 9.

Rectus abdominis muscle—25: 25.

May be exposed by making a longitudinal incision through the aponeurotic sheath of the rectus abdominis muscle at a distance of about 3 cm. from the linea alba, the inferior end of each incision curving toward the symphysis pubis.

Tendinous inscriptions—23: 37.

Sheath of the rectus abdominis muscle—25: 39.

Linea simicircularis—25: 40.

The following arteries are in relationship to the rectus sheath:

Inferior epigastric artery—51: 32.

Superior epigastric artery—48: 47.

Pyramidalis muscle—25: 27.

Linea alba—25: 34.

Fascia transversalis—25: 50.

Deep circumflex iliac artery—51: 37.

Peritoneum—43: 46.

May be exposed by the removal of a small portion of the fascia transversalis.

b. Internal surface of the anterior abdominal wall.

May be exposed by beginning at a point just above the umbilicus and making two incisions through the abdominal wall: (a) transversely from side to side; (b) longitudinally just to the left of the linea alba and extending to the superior ramus of the pubic bone.

Urachus—39: 34.

Plica umbilicalis media—44: 22.

Plica umbilicalis lateralis—44: 23.

Plica epigastrica—44: 24.

Fovea supravescicalis—25: 57.

Fovea inguinalis media—25: 56.

Fovea inguinalis lateralis—25: 55.

Abdominal inguinal ring—25: 52.

3. INGUINAL CANAL, SCROTUM, SPERMATIC CORD, AND TESTIS.

a. Inguinal canal—25: 51.

A demonstration of its boundaries involves the removal of the peritoneum from the anterior abdominal wall in the region of the inguinal canal.

Falx inguinalis—25: 26.

Reflex inguinal ligament—25: 43.

b. Scrotum and spermatic cord.

For the pudendal region see Section II: 1*b*, *c*.

Scrotum—41: 31.

The scrotal sac may be opened and its contents exposed by making a longitudinal incision through the anterior wall of the scrotum.

Raphe of the scrotum—41: 32.

Septum of the scrotum—41: 33.

Tunica dartos—41: 34.

Spermatic cord—40: 37.

Cremasteric fascia—40: 47.

Cremasteric muscle—40: 46.

(Vaginal peritoneal process)—40: 38.

Tunica vaginalis communis—40: 45.

Ductus deferens—40: 21.

Internal spermatic artery—50: 52.

External spermatic artery—51: 35.

Deferential artery—51: 11.

Pampiniform plexus of veins—55: 14.

Spermatic vein—55: 11.

External spermatic nerve—70: 35.

Deferential plexus—72: 42.

Lymphatics.

c. Testis—39: 66.

Tunica vaginalis propria testis—40: 39.

Lamina parietalis—40: 40.

Lamina visceralis—40: 41.

Sinus epididymidis—40: 44.

The testis may be exposed by making an incision through the anterior part of the lamina parietalis of the tunica vaginalis propria.

Superior and inferior extremities of the testis—39: 67, 68.

Lateral and medial surfaces—39: 69, 70.

Anterior and posterior margins—39: 71, 72.

Epididymis—40: 9.

Head, body and tail of epididymis—40: 10–12.

Appendix testis—40: 18.

The following structures may be identified in cross-section of the testis:

Tunica albuginea—39: 73.

Mediastinum testis—39: 74.

Septula testis—39: 75.

Lobules—40: 1.

Parenchyma—40: 2.

For the structures of the penis, see II: 1*b*, 2*a* and VI: 3*a*.

IV. Abdominal Cavity, Peritoneum, and Viscera

1. ABDOMINAL CAVITY AND THE PERITONEUM.

a. General characteristics of the abdominal cavity, viscera and peritoneum.

In completing the opening of the abdominal cavity and demonstrating the abdominal and peritoneal relations of the following structures, the incision already made through the lower part of the anterior abdominal wall (Section III: 2*b*) is extended upward from the umbilicus to the xiphoid process, passing just to the left of the midsagittal plane. The following structures should be examined without dissection:

- Liver—34: 43.
- Gall bladder—35: 6.
- Stomach—32: 78.
- Greater omentum—43: 70.
- Small intestine—33: 29.
- Large intestine—33: 61.
- Lesser omentum—43: 64.
- Peritoneum—43: 46.
- Parietal peritoneum—43: 49.
- Visceral peritoneum—43: 50.
- Peritoneal cavity—43: 51.

b. Peritoneal folds and fossa in relation to the small and large intestine.

- Mesentery—43: 53.
- Root of mesentery—43: 54.
- Duodenojejunal recess—44: 9.
- Duodenojejunal fold—44: 10.
- Greater omentum—43: 70.
- Gastrocolic ligament—43: 69.
- Mesocolon—43: 56.
- Transverse mesocolon—43: 57.
- Ascending mesocolon—43: 58.
- Descending mesocolon—43: 59.
- Sigmoid mesocolon—43: 60.
- Mesorectum—43: 61.
- Mesentery of the vermiform process—43: 62.
- Ileocaecal fold—44: 15.
- Superior ileocaecal recess—44: 13.
- Inferior ileocaecal recess—44: 14.
- Caecal fold—44: 18.
- Caecal fossa—44: 16.
- Retrocaecal recess—44: 17.
- Paracolic recess—44: 19.
- Phrenicocolic ligament—44: 1.

c. Peritoneal ligaments in relation to the liver, stomach, and spleen.

- Falciform ligament of the liver—44: 3.
- Ligamentum teres of the liver—34: 56.
- Coronary ligament of the liver—44: 4.
- Right and left triangular ligaments—44: 5, 6.
- Lesser omentum—43: 64.
 - Hepatogastric ligament—43: 65.
 - Hepatoduodenal ligament—43: 66.
- Gastrosplenic ligament—43: 68.
- Phrenicosplenic ligament—44: 2.
- Gastrocolic ligament—43: 69.

d. Omental bursa—43: 71.

- Foramen epiploicum—43: 77.
- The extent and following subdivisions of the omental bursa may be determined by inserting the finger through the foramen epiploicum:
- Vestibule of bursa—43: 72.
- Superior omental recess—43: 73.
- Inferior omental recess—43: 74.
- Splenic recess—43: 75.

e. Relations of the pelvic peritoneum.

- Rectovesical excavation or pouch—44: 38.
- Pubovesical fold**—44: 25.
- Transverse vesical fold—44: 26.
- The following structures relate to the female pelvis only:
- Broad ligament of the uterus—44: 29.
- Rectouterine excavation or pouch—44: 36.
- Vesicouterine excavation or pouch—44: 37.

f. Peritoneal relations in general.

The relations of the peritoneum in general may be traced with the hand at different levels in transverse and sagittal planes of the abdomen. Some of the peritoneal relations of such retroperitoneal organs as the kidney, duodenum, and pancreas may be determined by palpation.

2. MESENTERIC BLOOD VESSELS, NERVES, AND LYMPHATICS.

Superior mesenteric artery—50: 36. (Not including its origin.)

Exposed by removing the right layer of peritoneum of the mesentery, the inferior layer of the transverse mesocolon, and the peritoneum of the posterior abdominal wall between the root of the mesentery and the ascending colon.

- Intestinal arteries—50: 37.
- Jejunal arteries—50: 39.
- Ileal arteries—50: 40.
- Inferior pancreaticoduodenal artery—50: 38.

Ileocolic artery—50:41.

Appendicular artery—50:42.

Right colic artery—50:43.

Middle colic artery—50:44.

Superior mesenteric vein—55:17.

The tributaries of the superior mesenteric vein—55:18:25, consist of vessels corresponding to the branches of the superior mesenteric artery, together with veins from the stomach and pancreas.

Superior mesenteric sympathetic plexus—72:32.

Mesenteric lymph glands—56:64.

Mesocolic lymph glands—56:65.

Inferior mesenteric artery—50:45.

May be demonstrated by removing the peritoneum from the posterior abdominal wall between the root of the mesentery and the descending and iliac colon.

Left colic artery—50:46.

Sigmoid arteries—50:47.

Superior haemorrhoidal artery—50:48. (Exclusive of its termination.)

Inferior mesenteric vein—55:26.

Left colic vein—55:27.

Sigmoid veins—55:28.

Superior haemorrhoidal vein—55:29.

Participates in an important anastomosis between the systemic and portal circulations.

Inferior mesenteric sympathetic plexus—72:35.

3. MESENTERIAL SMALL INTESTINE AND THE LARGE INTESTINE.

a. Mesenterial small intestine—33:58.

Jejunum—33:59.

Ileum—33:60.

Meckel's diverticulum.

The following structures can best be demonstrated in the intestine which has been removed from the abdomen, opened along its mesenteric border, and its contents washed out. For its removal, the small intestine may be divided between ligatures about 5 cm. below the duodenojejunal flexure and about 10 cm. above the ileocaecal junction, and its connections severed with the mesentery and mesenterial blood vessels.

Tunica serosa—33:30.

Tunica muscularis—33:31.

Longitudinal layer—33:32.

Circular layer—33:33.

Tela submucosa—33:34.

Tunica mucosa—33:35, 36.

Plicae circulares—33:37.

Intestinal villi—33:38. (Demonstrated with a hand lens.)

Intestinal glands—33:40. (Demonstrated with a hand lens.)

Aggregated lymph nodules—33:41.
 Solitary lymph nodules—33:40.
 Chyme—33:42.
 Chyle—33:43.
 Intestinal juice—33:44.

b. Large intestine—33:61.

Caecum—33:62.
 Vermiform process—33:67.
 Colon—33:70.
 Ascending colon—33:71.
 Right colic flexure—33:72.
 Transverse colon—33:73.
 Left colon flexure—33:74.
 Descending colon—33:75.
 Sigmoid colon—33:76.
 Taeniae coli—33:82.
 Taenia mesocolica—34:1.
 Taenia omentalis—34:2.
 Taenia libera—34:3.
 Haustra coli—33:78.
 Appendices epiploicae—33:80.

The following structures can be demonstrated to best advantage after the large intestine has been divided between ligatures at the junction of the sigmoid colon with the rectum, removed from the abdomen and its contents washed out. Before dividing the gastro-colic ligament and transverse mesocolon their relations to the omental bursa should be reexamined.

Valvula coli—33:63.
 Inferior and superior lips—33:64, 65.
 Frenula of the valve of the colon—33:66.
 (Valve of the vermiform process)—33:68.
 Aggregated nodules of the vermiform process—33:69.
 Tunica serosa—33:79.
 Tunica muscularis—33:81.
 Tunica submucosa—34:4.
 Tunica mucosa—34:5, 6.
 Intestinal glands—34:7.
 Solitary lymphatic nodules—34:8.

4. STRUCTURES IN RELATION TO THE WALLS OF THE OMENTAL BURSA.

a. Biliary ducts and vessels in the lesser omentum.

The exposure of the structures in the lesser omentum may be facilitated by the removal of the greater part of the left lobe of the liver. To this end an incision may be made through the left lobe in an anterior-posterior direction, beginning just at the left of the falciform ligament and terminating near the left margin of the fossa for the ductus venosus (keeping the detached part of the liver wrapped in a damp cloth for later reference).

- Common bile duct—35:16.
- Hepatic duct—35:3.
- Cystic duct—35:10.
- Portal vein—55:15.
- Hepatic artery—50:19.
- Right gastric artery—50:20.
- Proper hepatic artery—50:21.
- Right ramus—50:22.
- Cystic artery—50:23.
- Left ramus—50:24.
- Left gastric artery—50:17.

b. Remaining vessels in relation to the walls of the omental bursa.

- Gastroduodenal artery—50:25.
- Right gastroepiploic artery—50:29.
- In exposing the following structures any remaining parts of the lesser omentum are removed, the right gastric artery, right gastroepiploic artery, and stomach are divided just to the left of the pylorus, the stomach displaced toward the left side, and the posterior wall of the lesser omental bursa carefully removed, guarding against undue displacement of the pancreas.
- Superior pancreaticoduodenal artery—50:26.
- Coeliac artery—50:16.
- Left gastric artery—50:17.
- Hepatic artery—50:19. (For its branches see the preceding section, 4a.)
- Splenic artery—50:31.
- Pancreatic rami—50:32.
- Left gastroepiploic artery—50:33.
- Short gastric arteries—50:34.
- Splenic rami—50:35.
- Portal vein—55:15.
- Coronary vein of the stomach—55:16.
- Superior mesenteric vein—55:17.
- Splenic vein—55:30.
- Left gastroepiploic vein—55:32.
- Inferior mesenteric vein—55:26.
- Cystic vein—55:33.
- Parumbilical veins—55:36.
- The portal vein also participates in important oesophageal, rectal, peritoneal, and umbilical anastomoses.

5. DUODENUM AND PANCREAS.

a. Duodenum—33:45.

- Pars superior—33:46.
- Pars descendens—33:47.
- Pars horizontalis—33:49.
- Pars ascendens—33:50.

Suspensory muscle of the duodenum—33:54.

Duodenal papilla—33:56.

Exposed by making a longitudinal incision through the anterior wall of the duodenum.

Longitudinal fold of duodenum—33:55.

b. Pancreas—34:26.

Head of pancreas—34:27.

Uncinate process—34:28.

Notch of the pancreas—34:29.

Body of the pancreas—34:30.

Anterior, posterior and inferior surfaces—34:31-33.

Superior, anterior and posterior margins—34:34-36.

Omental tuber—34:37.

Tail of pancreas—34:38.

Pancreatic duct—34:39.

Accessory pancreatic duct—34:40.

(Accessory pancreas)—34:41.

6. STOMACH AND SPLEEN.

a. Stomach—32:78.

Vagus nerve—68:22. (In its relation to the stomach and adjacent organs.)

Anterior and posterior gastric plexuses—68:51, 52.

Hepatic rami—68:53.

Coeliac rami—68:54.

Stomach—32:78.

Anterior and posterior walls of stomach—32:79, 80.

Greater and lesser curvatures of stomach—33:1, 2.

Cardia—33:3.

Fundus of stomach—38:4.

Body of stomach—33:5.

Pylorus—33:6.

Cardiac part—33:7.

Pyloric part—33:8.

(Cardiac antrum)—33:9.

Pyloric antrum—33:10.

The exposure of the following structures is facilitated by dividing the abdominal part of the oesophagus, removing the stomach, and opening the stomach by an incision along its greater curvature.

Serous coat—33:11.

Muscular coat—33:12.

Longitudinal layer—33:13.

Circular layer—33:15.

Oblique fibers—33:17.

Sphincter muscle of pylorus—33:16.

Pyloric valve—33:18.

Tela submucosa—33:19.

Tunica mucosa—33 : 20.
Gastric pits—33 : 24.

b. Spleen—35 : 18.

Diaphragmatic surface—35 : 19.
Renal surface—35 : 20.
Gastric surface—35 : 21.
Superior and inferior extremities—35 : 22, 23.
Posterior and anterior margins—35 : 24, 25.
Tunica serosa—35 : 27.
Tunica albuginea—35 : 28.
Splenic pulp—35 : 30.
Splenic rami of splenic artery—35 : 31.
(Accessory spleen)—35 : 34.

7. SYMPATHETIC PLEXUSES IN RELATION TO THE COELIAC GANGLION AND COELIAC PLEXUS.

Coeliac plexus—72 : 19
Coeliac ganglion—72 : 20.

If the thorax has been previously dissected, these ganglia may be conveniently located by tracing the great splanchnic nerves down to their junction with the ganglia.

Superior gastric plexus—72 : 26.
Hepatic plexus—72 : 24.
Inferior gastric plexus—72 : 27.
Splenic plexus—72 : 25.
Renal plexus—72 : 29.
Suprarenal plexus—72 : 28.
Phrenic plexus—72 : 22.
Superior mesenteric plexus—72 : 32.
Abdominal aortic plexus—72 : 18.

8. LIVER—34 : 43.

For the ligaments and peritoneal relation of the liver, see IV : 1c. The removal of the liver involves the following incisions: (*a*) division of the portal vein at the level of the foramen epiploicum; (*b*) raising the liver as much as possible, cutting through the inferior vena cava vein at the point where it comes in contact with the inferior aspect of the liver, and to the right of the inferior vena cava cutting through the inferior layer of the coronary ligament; (*c*) in connection with the superior and posterior aspects of the liver dividing the ligamentum teres and the falciform ligament, the right and left triangular ligaments and superior layer of the coronary ligament; (*d*) separating the posterior surface of the liver from the diaphragm, making a second cut through the inferior vena cava just below the diaphragm and completing the detachment of the organ.

Right lobe of liver—34 : 59.
Quadrate lobe of liver—34 : 60.
Caudate lobe of liver—34 : 61.
Papillary process—34 : 62.
Caudate process—34 : 63.

- Left lobe of liver—34: 64.
- Right sagittal fossa—34: 49.
 - Fossa for the gall bladder—34: 50.
 - Fossa for vena cava—34: 51.
- Left sagittal fossa—34: 52.
 - Fossa for umbilical vein—34: 53.
 - Fossa for ductus venosus—34: 54.
- Anterior margin—34: 47.
 - Incisura umbilicalis—34: 48.
- Superior surface—34: 44.
- Posterior surface—34: 45.
 - Oesophageal impression—34: 68.
 - Suprarenal impression—34: 73.
- Inferior surface—34: 46.
 - Porta hepatis—34: 58.
 - Omental tuber—34: 67.
 - Gastric impression—34: 69.
 - Duodenal impression—34: 70.
 - Colic impression—34: 71.
 - Renal impression—34: 72.

The following hepatic structures may be demonstrated in cut surfaces of the liver, some of them requiring a hand lens or microscope for their identification.

- Hepatic lobules—34: 74.
- Fibrous capsule—34: 75.
- Interlobular arteries—34: 76.
- Interlobular veins—34: 77.
- Central veins—34: 78.
- Bile ducts—35: 1.
- Interlobular ducts—35: 2.
- Vasa aberrantia hepatis—35: 3.
- Bile—35: 5.
- Gall bladder—35: 6.
 - Fundus of gall bladder—35: 7.
 - Body of gall bladder—35: 8.
 - Neck of gall bladder—35: 9.
 - Cystic duct—35: 10.
 - Spiral valve—35: 15.

The following structures require a hand lens or a microscope for their adequate demonstration:

- Tunica serosa of gall bladder—35: 11.
- Tunica muscularis of gall bladder—35: 12.
- Tunica mucosa of gall bladder—35: 13.
 - Plica tunicae mucosae of gall bladder—35: 14.
- Glandulae mucosae biliosae—35: 17.

9. SUPRARENAL GLAND, KIDNEY, AND URETER.

a. *Suprarenal gland*—39: 52.

- Hilus of suprarenal gland—39: 55.
- Anterior and posterior surfaces—39: 56, 57.

Base—39 : 58.
 Apex—39 : 59.
 Superior and medial margins—39 : 60, 61.
 (Accessory suprarenal glands)—39 : 63.
 Cortical substance—39 : 53.
 Medullary substance—39 : 54.
 Central vein—39 : 62.

b. Vascular supply of the kidney and suprarenal glands.

Renal artery—50 : 50. (Cf. also—39 : 4.)
 Inferior suprarenal artery—50 : 51.
 Middle suprarenal artery—50 : 49.
 Superior suprarenal rami of the inferior phrenic artery**
 —50 : 8.
 Renal veins—55 : 9.
 Suprarenal veins—55 : 10.

c. Kidney—38 : 37.

Adipose capsule—38 : 49. —
 Lateral margin—38 : 38.
 Medial margin—38 : 39.
 Renal hilus—38 : 40.
 Renal sinus—38 : 41.
 Anterior and posterior surfaces—38 : 42, 43.
 Superior and inferior extremities—38 : 44, 45.
 (Hepatic impression)—38 : 47.
 (Gastric impression)—38 : 48.
 The following structures may be demonstrated to best advantage
 by cutting through the kidney along its lateral margin and
 dividing the organ into symmetrical halves:
 Tunica fibrosa—38 : 50.
 Cortical substance—38 : 55.
 Medullary substance—38 : 56.
 Renal pyramids—38 : 58.
 Renal papillae—38 : 60.
 Renal columns—38 : 63.
 Renal pelvis—38 : 70.
 Renal calyces—38 : 71. *pelv*

d. Ureter—39 : 19.

Abdominal part—39 : 20.

10. DIAPHRAGM. — *u r*

Diaphragm—25 : 9.

Lumbar part—25 : 10. — *example has*
 Medial crus—25 : 11. *connects*
 Intermediate crus—25 : 12.
 Lateral crus—25 : 13.
 Costal part—25 : 14.

Sternal part—25:15.
 Aortic opening—25:16.
 Oesophageal opening—25:17.
 Central tendon—25:18.
 Opening for vena cava—25:19.
 Medial lumbocostal arch—25:20.
 Lateral lumbocostal arch—25:21.

V. Structures in Relation to the Posterior Abdominal Wall

1. BLOOD VESSELS AND LYMPHATICS.

a. Arteries.

Abdominal aorta—50:5.
 Parietal branches—50:6.
 Inferior phrenic artery—50:7.
 Superior suprarenal rami—50:8.
 Lumbar arteries—50:9-11.

These arteries pass posterior to the sympathetic trunk which together with other nerves of the abdominal wall should be guarded from injury.

Middle sacral artery—50:12. *-(Origin only.)* *2 by 2*

Visceral branches—50:15.
 For the rami of the first five of the following arteries see IV: 2, 4*b* and 9*b*.

Coeliac artery—50:16.
 Superior mesenteric artery—50:36.
 Inferior mesenteric artery—50:45.
 Middle suprarenal artery—50:49.

Renal arteries—50:50.
 Internal spermatic arteries—50:52.

Testicular artery—50:53.

Ovarian artery—50:54.

Common iliac arteries—50:55.

Hypogastric artery—50:56. *(Origin only.)*

External iliac artery—51:31.

Inferior epigastric artery—51:32. *from epi*

Deep circumflex iliac artery—51:37.

b. Veins and lymphatics.

Inferior vena cava—55:3.
 Parietal roots—55:4.
 Inferior phrenic vein—55:5.
 Lumbar veins—55:6.
 Visceral roots—55:7.
 Hepatic veins—55:8.
 Renal veins—55:9.
 Suprarenal veins—55:10.
 Spermatic vein—55:11.

- Testicular vein—55:12.
- Ovarian vein—55:13.
- Common iliac veins—55:37.
- Middle sacral vein—55:38.
- Hypogastric vein—55:39. (Termination only.)
- External iliac veins—55:58.
- Inferior epigastric veins—55:59.
- Deep circumflex iliac vein—55:60.
- Cisterna chyli—56:28.
- Intestinal lymphatic trunk—56:27.
- Lumbar lymphatic trunks—56:26.
- Iliac lymph glands—56:57. — lower iliac
- Lumbar lymph glands—56:58.
- Coeliac lymph glands—56:59.
- Azygos vein—56:53.
- Hemiazygos vein—54:54.

2. FASCIA AND MUSCLES OF POSTERIOR ABDOMINAL WALL.

- Iliac fascia—27:55.
- Quadratus lumborum muscle—25:32.
- Iliopsoas muscle—26:63.
- Iliac muscle—26:64.
- Psoas major muscle—26:65.

In the demonstration of this muscle the following nerves are encountered and should be guarded from injury: the sympathetic trunk, medial to it, the genitofemoral nerve in relation to its anterior surface, the ilioinguinal and lateral femoral cutaneous nerves in relation to its lateral margin, and the femoral nerve, situated between the psoas major and iliacus muscles.

- Psoas minor muscle—26:66.

3. NERVES OF THE POSTERIOR ABDOMINAL WALL.

- Abdominal part of the sympathetic trunk—72:15.
- Lumbar ganglion—72:16.
- Rami communicantes—68:72.
- Twelfth intercostal nerve—70:1.
- Lumbar nerves—70:11.

In demonstrating the lumbar nerves and lumbar plexus the psoas major muscle is removed by blunt dissection.

- Lumbar plexus—70:23.
- Muscular rami—70:24.
- Iliohypogastric nerve—70:25.
- Ilioinguinal nerve—70:29.
- Genitofemoral nerve—70:33.
- Lumboinguinal nerve—70:34.
- External spermatic nerve—70:35.
- Lateral femoral cutaneous nerve—70:36.
- Femoral nerve—70:41.
- Obturator nerve—70:37.
- Lumbosacral trunk—70:48. (Origin only.)

VI. Pelvis

1. OSTEOLOGY.

- Coxal bone—15: 7.
- Obturator foramen—15: 8.
- Iliac bone—15: 14.
- Iliac crest—15: 18.
- Iliac fossa—15: 31.
- Ischial bone—15: 32.
- Superior ramus of the ischial bone—15: 34.
- Inferior ramus of the ischial bone—15: 35.
- Pubic bone—15: 40.
- Obturator sulcus—15: 46.
- Inferior and superior rami of the pubic bone—15: 49, 50.
- Sacrum—7: 5.
- Pelvic surface—7: 7.
- Promontory—7: 10.
- Anterior sacral foramina—7: 15.
- Apex of sacral bone—7: 24.
- Coccyx—7: 25.
- Pelvis—15: 52.
- Symphysis of pubic bone—15: 53.
- Pubic arch—15: 54.
- Major pelvis—15: 56.
- Minor pelvis—15: 57.
- Linea terminalis—15: 58.
- Superior aperture of the pelvis—15: 62.
- Inferior aperture of the pelvis—15: 63.
- Pelvic axis—15: 64.
- Conjugate, transverse and oblique diameters—15: 65-67.
- Pelvic inclination—15: 68.

2. PERITONEUM AND FASCIA IN RELATION TO THE PELVIS.⁶*a. Peritoneal folds in the male pelvis.*

- Transverse vesical fold—44: 26.
- Pubovesical fold**—44: 25.
- Mesorectum—43: 61.
- Rectovesical excavation—44: 38.

b. Peritoneum of the female pelvis.

- Rectouterine folds—44: 35.
- Rectouterine excavation—44: 36.
- Vesicouterine excavation—44: 37.

⁶ An alternative procedure as noted in Section II is to introduce here a study of the perineal region, the body being either placed in the lithotomy position or else divided transversely at the level of the articulation of one of the lower lumbar vertebrae and the pelvis carefully divided in the median sagittal plane (the latter method, however, is not to be especially recommended).

- Fossa ovarica—44: 33.
- Broad ligament of uterus—44: 29.
 - Mesometrium—44: 30.
 - Mesosalpinx—44: 31.
 - Mesovarium—44: 32.
- Suspensory ligament of the ovary—44: 34.

c. Fascia.

Pelvic fascia—43: 26.

May be demonstrated by removing the pelvic peritoneum by blunt dissection, guarding at the same time against injury to nerves and vessels.

Superior fascia of pelvic diaphragm—43: 28.

Tendinous arch of pelvic fascia—43: 29.

Endopelvic fascia—43: 27.

Middle puboprostatic ligament—43: 30. (In the male.)

Middle pubovesical ligament—43: 30. (In the female.)

Lateral puboprostatic ligament—43: 31. (In the male.)

Lateral pubovesical ligament—43: 31. (In the female.)

The demonstration of the anterior relations of the pelvic fascia may be completed and the subsequent exposure of pelvic viscera facilitated (i.e. if the pelvis has not already been previously divided in the median sagittal plane) by making the following dissections: (a) detaching the suspensory ligament of the penis from the front of the symphysis, guarding at the same time against injury to the dorsal vein of the penis; (b) detaching all muscles and fascia from the anterior surface of each pubic bone over a region extending about 2.5 cm. laterally from the symphysis pubis; (c) sawing through the pubic bones by an incision on each side of the symphysis pubis extending from the pubic tubercle to a point just below the attachment of the arcuate ligament of the pubis; and (d) detaching the pelvic fascia from the posterior surface of this isolated segment of bone and carefully removing the bone, retaining the latter for later reference.

Inferior fascia of the pelvic diaphragm—43: 32.

Obturator fascia—43: 40.

Tendinous arch of the levator ani muscle—43: 22.

Superior fascia of the urogenital diaphragm—43: 36.

3. PELVIC VISCERA.

a. In the male pelvis.

Urinary bladder—39: 29.

Vertex of bladder—39: 30.

Body of bladder—39: 31.

Fundus of bladder—39: 32.

Urachus*—39: 34.

The following structures may be exposed by an incision beginning at the vertex of the bladder and extending through its wall in an anterior-posterior direction in the line of its median plane.

Tunica serosa—39: 35.

Tunica muscularis—39: 36-39.

~~XX~~

Tela submucosa—39:42.

Tunica mucosa—39:43.

Trigone of the bladder—39:46.

Uvula of the bladder—39:47.

Urethral fold—39:48.

Orifice of ureter—39:49.

Internal urethral orifice—39:50.

Urethral ring—39:51.

Male urethra—41:19.

Its internal structure may be exposed by introducing blunt-pointed scissors into the internal urethral orifice and dividing the dorsal wall of the urethral canal throughout its entire extent.

Prostatic part—41:20.

Urethral crest—41:21.

Seminal hillock—41:22.

Prostatic utricle—41:23.

Ejaculatory ducts—40:30. (Their openings only.)

Prostatic ducts—40:59. (Their openings only.)

Membranous part—41:24.

Cavernous part—41:25.

Excretory ducts of bulbourethral glands—40:64.

Navicular fossa of urethra—41:26.

(Valvula fossae navicularis)—41:27.

External urethral orifice—41:28.

Urethral lacunae—41:29. *not like recesses*

Penis—40:66.

The following structures may be demonstrated in cross-sections of the penis. For other structures of penis see II:1*b* and 2*a*.

Corpus cavernosum penis—41:4.

Corpus cavernosum urethrae—41:5.

Tunica albuginea—41:9.

Septum penis—41:10.

Trabeculae corporum cavernosorum—41:11.

Cavernae corporum cavernosorum—41:12.

The demonstration of the remaining pelvic structures may be facilitated (i.e., if the possible alternative indicated in the footnote to the preceding section has not been followed) by detaching the fifth lumbar vertebra from the sacrum, dividing the sacrum, coccyx, and any remaining soft structures in the median sagittal plane, and separating the two halves of the pelvis.

Rectum—34:9.

Sacral flexure—34:10.

Perineal flexure—34:11.

Rectal ampulla—34:12.

Mucous membrane—34:17.

Transverse rectal folds—34:21.

Rectococcygeal muscle—34:15.

Anal part of rectum—34:22.

Rectal columns—34:23.

Rectal sinuses—34:24.

- Hemorrhoidal ring—34: 25.
- Sphincter ani internus muscle—34: 14.
- Pelvic part of ureter—39: 21.
- Prostate—40: 50.
 - Base—40: 51.
 - Apex—40: 52.
 - Anterior and posterior surfaces—40: 53, 54.
 - Right and left lobes—40: 55.
 - Isthmus—40: 56.
 - (Middle lobe)—40: 57.
- Seminal vesicles—40: 31.
 - Body of seminal vesicle—40: 32.
 - Excretory duct—40: 36.
- Ductus deferens—40: 21. *with duct of seminal vesicle, is ejaculatory duct*
- Ampulla of ductus deferens—40: 22.
- Diverticula of ampulla—40: 23.
- Ejaculatory duct—40: 30.

b. In the female pelvis.

The demonstration of the following structures may be facilitated (i.e., if the possible alternative indicated in the footnote to the preceding section has not been followed) by detaching the fifth lumbar vertebra from the sacrum, dividing the sacrum, coccyx, symphysis pubic, and any remaining soft structures in the median sagittal plane and separating the two halves of the pelvis.

Peritoneum—43: 46.

For structures relative to the peritoneum in the female pelvis, see VI: 2b.

Pelvic fascia—43: 26. (Cf. VI: 2c.)

Urinary bladder—39: 29.

For structures relative to the urinary bladder, see VI: 3a.

Female urethra—42: 70.

External urethral orifice—42: 71.

Crista urethralis—43: 2. *rarely seen*

Pelvic part of ureter—39: 21.

Ovary—41: 36.

Hilus—41: 37.

Medial and lateral surfaces—41: 38, 39.

Free margin—41: 40.

Mesovarian margin—41: 41.

Tubal extremity—41: 42.

Uterine extremity—41: 43.

Ovarian ligament—41: 56.

Corpus luteum—41: 54.

Corpus albicans—41: 55.

Paroophoron—42: 43.

Epoophoron—42: 39.

Uterine tube—41: 57.

Ostium abdominale—41: 58.

- Infundibulum—41: 59.
- Fimbriae—41: 60.
 - Fimbria ovarica—41: 61.
- Ampulla—41: 62.
- Isthmus—41: 63.
- Uterus—41: 76.
 - Body of uterus—41: 77.
 - Fundus—42: 1.
 - Lateral margin—42: 2.
 - Vesical surface—43: 3.
 - Intestinal surface—42: 4.
 - Uterine cavity—42: 5.
 - Cervix—42: 7.
 - Supravaginal part—42: 8.
 - Vaginal part—42: 9.
 - External orifice of uterus—42: 10.
 - Anterior lip—42: 11.
 - Posterior lip—42: 12.
 - Canal of the cervix—42: 13.
 - Internal orifice of the uterus—42: 6.
 - Ligamentum teres—42: 23.
- Vagina—42: 25.
 - Fornix of vagina—42: 26.
 - Anterior and posterior walls—42: 27, 28.
 - Hymen—42: 29.
 - Hymeneal caruncles—42: 30.
- Rectum—34: 9.
 - For its structural characteristics, see VI: 3a.

4. PELVIC BLOOD VESSELS (MALE AND FEMALE).

In the following tabulation vessels which are either male or female only are so indicated. All other vessels are common to both sexes.

a. Arteries.

- Hypogastric artery—50: 56.
 - Parietal rami of the hypogastric artery—50: 57.
 - 1— Iliolumbar artery—50: 58.
 - Lumbar ramus**—50: 59.
 - Spinal ramus**—50: 60.
 - Iliac ramus**—50: 61.
 - 2— Lateral sacral artery—50: 62.
 - Spinal rami**—50: 63.
 - Obturator artery—50: 64.
 - Pubic ramus—50: 65.
 - 3— Superior gluteal artery—51: 1.
 - Inferior gluteal artery—51: 4.
 - Visceral rami of the hypogastric artery—51: 6.
 - Umbilical artery—51: 7.

*Post. division
hypogastric*

- Superior vesical arteries**—51:8.
- [Lateral umbilical ligament]**—51:9.
- ✓ Inferior vesical artery—51:10.
- Deferential artery**—51:11. (In the male only.)
- Uterine artery—51:12. (In the female only.)
- Vaginal artery—51:13.
- Ovarian ramus—51:14.
- Tubal ramus—51:15.
- Ovarian artery—50:54. (In the female only.)
- Middle hemorrhoidal artery—51:16.
- Internal pudendal artery—51:17.
- For its perineal rami in both male and female, see II: 2-4.

- Superior hemorrhoidal artery—50:48.
- Middle sacral artery—50:12.
- Lowest lumbar artery**—50:13.
- Glomus coccygeum**—50:14.

b. Veins of the pelvis.

- Hypogastric vein—55:39.
- The tributaries of the hypogastric vein—55:40, 49:53, 49:55-57, correspond to a large degree with the branches of the hypogastric artery.
- Hemorrhoidal plexus—55:46.
- Vesical plexus**—55:47.
- Pudendal plexus**—55:48.
- Uterovaginal plexus**—55:54. (In the female only.)
- Middle sacral vein**—55:38.

5. PELVIC MUSCLES AND NERVES.

May be exposed by displacing the viscera from the lateral pelvic walls and removing any remains of the superior fascia of the pelvic diaphragm—43:28, guarding at the same time against injury to the fifth sacral and the coccygeal nerves.

- Pelvic diaphragm—43:20.
- Levator ani muscle—43:21.
- Tendinous arch of the levator ani muscle—43:22.
- Coccygeus muscle—43:23, 25:59.
- Sacral plexus—70:47.
- Lumbosacral trunk—70:48.
- Superior gluteal nerve—70:49.
- Inferior gluteal nerve—70:50.
- Posterior femoral cutaneous nerve—70:51.
- Sciatic nerve—70:54.
- Pudendal plexus—71:15.
- Middle hemorrhoidal nerves**—71:16.
- Inferior vesical nerves**—71:17.
- Vaginal nerves**—71:18. (In the female.)
- Pudendal nerve—71:19.
- Coccygeal nerve**—71:26.

Pelvic part of the sympathetic system—72: 15.

Sacral ganglia—72: 17.

Obturator fascia—43: 40.

Obturator internus muscle—26: 72.

Piriformis muscle—26: 71.

6. PELVIC ARTICULATIONS.

Ligaments of the pelvic girdle—20: 45.

Obturator membrane—20: 46.

Obturator canal—20: 47.

Iliolumbar ligament—20: 48.

Sacrotuberous ligament—20: 49.

Falciform process—20: 50.

Sacrospinous ligament—20: 51.

Greater sciatic foramen—20: 52.

Lesser sciatic foramen—20: 53.

Sacro-iliac articulation—20: 54.

Anterior sacro-iliac ligaments—20: 55.

Interosseous sacro-iliac ligaments—20: 56.

Long and short posterior sacro-iliac ligaments—20: 57, 58.

Synovial cavity.

Symphysis pubis—20: 59.

Superior pubic ligaments—20: 60.

Arcuate ligament of pubis—20: 61.

Interpubic fibro-cartilage—20: 62.

Demonstrated by removing a slice of bone from the front of the symphysis pubis.

Sacro-coccygeal symphysis—18: 48.

Superficial posterior sacro-coccygeal ligament**—18: 49.

Deep posterior sacro-coccygeal ligament**—18: 50.

Anterior sacro-coccygeal ligament**—18: 51.

Lateral sacro-coccygeal ligament**—18: 52.

INFERIOR EXTREMITY

PLATE 9

Posterior aspect of the inferior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.

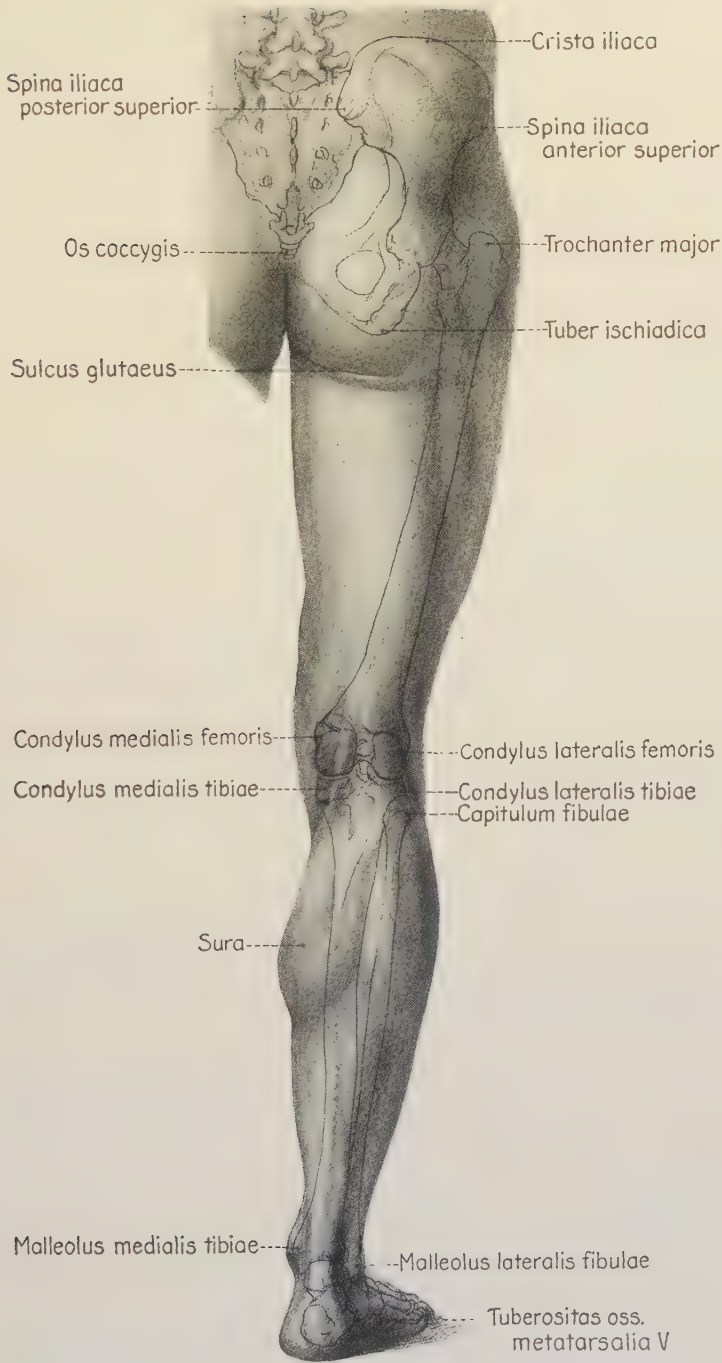
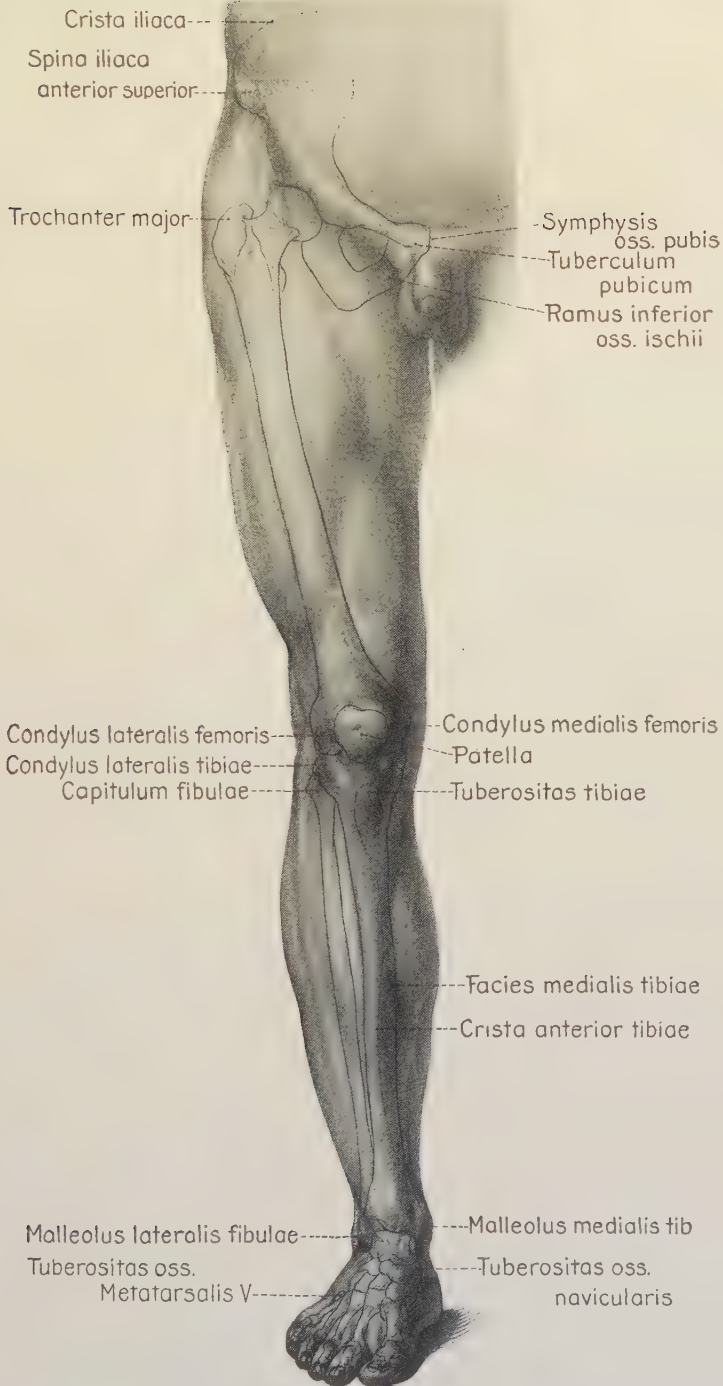


PLATE 10

Anterior aspect of the inferior extremity showing surface anatomy and surface projection of the bones of the girdle and free extremity.



1941 - 1957

1941 - 1957

1941 - 1957

1941 - 1957

1941 - 1957

1941 - 1957

1941 - 1957

1941 - 1957

(1941, 1957)

INFERIOR EXTREMITY

I. General Characteristics of the Inferior Extremity

1. SUBDIVISIONS.

Thigh—5: 45.

Anterior and posterior surface—5: 46, 47.

Lateral and medial surface—5: 48, 49.

Gluteal furrow—5: 50.

Knee—5: 51.

Posterior surface of knee—5: 52.

Patella—5: 53.

Leg—5: 54.

Foot—5: 60.

For the remaining subdivisions of the leg and foot, see VII: 1a.

For the osteology of the inferior extremity see 15: 5 to 17: 45.

2. REGIONS. (Pls. 11, 12. May be outlined on the skin with pen or crayon.)

Regions of the inferior extremity—84: 15.

Anterior femoral region—84: 16.

Subinguinal fossa—84: 17.

Lateral femoral region—84: 18.

Trochanteric region—84: 19.

Posterior femoral region—84: 20.

Medial femoral region—84: 21.

Anterior region of the knee—84: 22.

Patellar region—84: 23.

Posterior region of the knee—84: 24.

Popliteal fossa—84: 25. — *hollow in back of knee*

For the remaining regions of the inferior extremity, see VIII: 1c.

Regions of the back—83: 23.

Only those regions of the back are listed here which are in direct relation to the regions of the inferior extremity.

Region of the hip—83: 30.

Sacral region—83: 31.

Gluteal region—83: 32.

Perineal region—83: 33.

II. Gluteal Region

1. SURFACE ANATOMY. (Pls. 9, 10, 3, 4.) — 1449

Nates—5: 5.

Anal cleft—5: 7.

Coccyx—7: 25.

Sacrum—7: 5.

Crest of the ilium—15: 18.

Anterior superior iliac spine—15: 22.

Posterior superior iliac spine—15: 24.

Gluteal sulcus—5: 50.

Tuberosity of ischium—15: 36.

Greater trochanter—16: 2.

relations line drawn from ant sup spine to isch
whereby crossing of ant sup iliac spine
of greater trochanter

2. FASCIA AND CUTANEOUS NERVES.

Skin incisions: (a) from the posterior superior iliac spine along the iliac crest as far forward as possible; (b) from the posterior extremity of (a) obliquely distally and medially to the middle line of the sacral region, thence distally to the tip of the coccyx; (c) from the tip of the coccyx distally and laterally, crossing the middle point of the gluteal sulcus, to the junction of the middle and proximal thirds of the thigh.

Superficial fascia—23:36.

Superior clunial nerves—70:15.

Middle clunial nerves—70:21.

Lateral cutaneous ramus of the iliohypogastric nerve—70:27.

Lateral cutaneous ramus of the twelfth thoracic nerve—69:76.

Inferior clunial nerves—70:52.

Perineal rami of the posterior femoral cutaneous nerve**—70:53.

Deep fascia—43:32. — attached to iliac crest, sur.
which, pub. arching lig.
form collateral lig. of
pubic

3. GLUTAEUS MAXIMUS MUSCLE.

Glutaeus maximus muscle—26:67.

4. STRUCTURES EXPOSED BY THE REFLECTION OF THE GLUTAEUS MAXIMUS MUSCLE.

Demonstrated by separating the glutaeus maximus muscle from the underlying structures with the fingers, then either cutting through it two or three inches proximal to its insertion or detaching it at its origin and reflecting the muscle; at the same time exposing and detaching if necessary its nerve and vascular supply, but leaving intact the posterior femoral cutaneous nerve, sacrotuberous ligament, and perineal region.

a. Bursae in relation to the glutaeus maximus muscle.

Trochanteric bursa of the glutaeus maximus muscle—28:53.

Glutaeofemoral bursae—29:5.

Ischiatic bursa of the glutaeus maximus muscle—29:6.

b. Structures distal to the piriformis muscle.

Inferior gluteal nerve—70:50. 5, 12 — lower border of per.

Inferior gluteal artery—51:4. 9, 46 + 5, 12

Posterior femoral cutaneous nerve—70:51. — post. border of

Sciatic nerve—70:54. — 0. Sartorius

Internal pudendal artery—51:17. 144 —

Pudendal nerve—71:19.

Nerve to the obturator internus muscle. 420

Piriformis muscle—26:71. 5, 2

Obturator internus muscle—26:72. 420

Superior and inferior gemelli muscles—26:73, 74. 420

Quadratus femoris muscle—26:75. 420

Nerve to the quadratus femoris muscle.

May be exposed by detaching the two gemelli muscles at their origins, cutting the tendon of the obturator internus at its exit from the lesser sciatic foramen and reflecting these structures toward their insertions.

The following structures may be demonstrated by detaching the quadratus femoris muscle at its origin and reflecting it toward its insertion.

Obturator externus muscle—27:10. 4

Medial femoral circumflex artery—51:46. (Terminal branches only.)

c. Structures proximal and lateral to the piriformis muscle.

Glutaeus medius muscle—26:68.

Nerve to the tensor fasciae latae muscle.

Ascending branch of the lateral femoral circumflex artery—51:51.

The following structures may be exposed by separating the glutaeus medius muscle from the glutaeus minimus muscle, dividing the glutaeus medius muscle about 5 cm. proximal to the greater trochanter and reflecting the two parts toward their origin and insertion, respectively.

Superior gluteal artery—51:1.

Superior gluteal nerve—70:49.

Glutaeus minimus muscle—26:69.

5. STRUCTURES EXPOSED BY THE REFLECTION OF THE GLUTAEUS MINIMUS MUSCLE.

May be demonstrated by detaching the glutaeus minimus muscle at its origin and reflecting it toward its insertion.

Articular capsule of hip—20:64.

Trochanteric bursa of glutaeus minimus muscle—29:2.

Reflected tendon of the rectus femoris muscle.

III. Popliteal Space

1. SURFACE ANATOMY. (Pls. 9, 10.)

Tendon of the biceps femoris muscle—27:11.

Tendons of the semitendinous and semimembranosus muscles—27:14, 15.

Tendon of adductor magnus muscle—27:8.

Epicondyles of femur—16:19, 20.

Head of fibula—16:54.

Common peroneal nerve—70:56.

2. FASCIA, SUPERFICIAL NERVES, AND VESSELS.

Skin incisions: (a) longitudinally for about 20 cm. along the middle line of the posterior region of the knee, extending about 10 cm. distal and proximal to the line of the articulation of the knee; (b) transversely at each end of the preceding incision.

Superficial fascia—23:36.

Posterior femoral cutaneous nerve—70:51. (Terminal branches only.)

Small saphenous vein—56:1.

Femoropopliteal vein—56:2.

Deep fascia—27:70.

3. POPLITEAL SPACE: LARGE NERVES AND VESSELS.

May be exposed by making a longitudinal incision through the deep fascia in the middle line of the popliteal space, reflecting the fascia and demonstrating the structures with a minimum of dissection.

Tibial nerve—70: 68.

Common peroneal nerve—70: 56.

Posterior femoral cutaneous nerve—70: 51.

Popliteal artery—51: 63.

Popliteal veins—56: 4.

4. POPLITEAL SPACE: MEDIAL AND LATERAL BOUNDARIES.

Biceps muscle—27: 11.

Semitendinosus muscle—27: 14.

Semimembranosus muscle—27: 15.

Lateral head of gastrocnemius muscle—27: 24. 429

Medial head of gastrocnemius muscle—27: 25.

Plantaris muscle—27: 29.

5. CONTENTS OF THE POPLITEAL SPACE.

a. Nerves.

Posterior femoral cutaneous nerve—70: 51.

Tibial nerve—70: 68. 761

Muscular rami—70: 69.

Medial sural cutaneous nerve—71: 2.

Interosseous crural nerve**—71: 1.

Articular rami to knee joint.

Common peroneal nerve—70: 56.

Lateral sural cutaneous nerve—70: 58.

Peroneal anastomotic ramus—70: 59. 918

Articular rami to knee joint.

A genicular ramus of the obturator nerve may be present.

b. Blood vessels and lymphatics.

Popliteal artery—51: 63.

Superior lateral genicular artery—51: 64.

Superior medial genicular artery—51: 65.

Middle genicular artery—51: 66.

Inferior lateral genicular artery—51: 68.

Sural arteries—51: 67.

Popliteal veins—56: 4.

Popliteal lymph glands—57: 5.

6. FLOOR OF THE POPLITEAL SPACE.

Popliteal surface of femur—16: 15.

Oblique popliteal ligament—21: 15. 346

Associated with it is the fascia of the popliteus muscle.

IV. Posterior Part of the Thigh

1. FASCIA AND CUTANEOUS NERVES.

Skin incision: longitudinally through the skin remaining on the back of the thigh.

Superficial fascia—23:36.

Posterior femoral cutaneous nerve—70:51. (Terminal rami.)

Anterior femoral cutaneous nerve—70:42. (Medial terminal rami only.)

Cutaneous ramus of the obturator nerve—70:39.

Deep fascia—27:49.

2. MUSCLES.

Biceps femoris muscle—27:11.

Long head—27:12.

Short head—27:13.

Semimembranosus muscle—27:15.

Bursa of semimembranosus muscle—29:26.

3. NERVES AND BLOOD VESSELS.

Posterior femoral cutaneous nerve—70:51.

Ischiadic nerve—70:54.

Muscular rami—70:55.

First perforating artery—51:53.

Second perforating artery—51:55.

Third perforating artery—51:56.

Perforating veins—55:73.

Femoropopliteal vein—56:2.

V. Anterior Part of the Thigh

1. SURFACE ANATOMY. (Pls. 3, 10.)

Anterior superior iliac spine—15:22.

Symphysis pubis—20:59.

Inguinal ligament—25:41.

Pubic tubercle—15:44.

Pubic arch—15:54.

Inferior ramus of the pubis—15:49.

Inferior ramus of the ischium—15:35.

Tuberosity of the ischium—15:36.

Greater trochanter of the femur—16:2.

Patella—16:59.

Medial condyle of the femur—16:16.

Lateral condyle of the femur—16:17.

2. REGIONS IN RELATION TO THE ANTERIOR ASPECT OF THE THIGH.
(Pl. 11.)

Anterior femoral region—84:16.

Subinguinal fossa—84:17.

Lateral femoral region—84:18.

Trochanteric region—84:19.

Medial femoral region—84:21.

3. FASCIA, SUPERFICIAL VESSELS, LYMPHATICS, AND CUTANEOUS NERVES.

a. Superficial fascia, blood vessels, and lymphatics.

Skin incisions: (*a*) from the anterior superior iliac spine along the line of the inguinal ligament to the symphysis pubis; (*b*) from the median end of (*a*) distally, just lateral to the scrotum and along the medial aspect of the thigh for a distance of 10 cm.; (*c*) from the distal end of (*b*) anteriorly and transversely to the lateral aspect of the thigh; (*d*) from the end of incision (*b*) distally to the medial condyle of the tibia; (*e*) from the latter point anteriorly and transversely to the lateral condyle of the tibia. Guard against disturbance of structures superior to the inguinal ligament.

Superficial fascia—23 : 36.

Great saphenous vein—55 : 66.

Superficial epigastric vein—55 : 65.

Superficial circumflex iliac vein**—55 : 68.

External pudendal veins**—55 : 64.

Superficial epigastric artery—51 : 39.

Superficial circumflex iliac artery—51 : 40.

External pudendal arteries—51 : 41.

Superficial subinguinal lymph glands—57 : 3.

b. Fossa ovalis.

Fossa ovalis—27 : 65.

Falciform margin—27 : 66.

Superior cornu—27 : 67.

Inferior cornu—27 : 68.

Fascia cribrosa—27 : 69.

Some of the deep subinguinal lymph glands (57 : 4) may be in relation to the fossa ovalis.

c. Cutaneous nerves, superficial praepatellar bursae.

Ilioinguinal nerve—70 : 29.

Lumboinguinal nerve—70 : 34.

Lateral femoral cutaneous nerve—70 : 36.

Anterior femoral cutaneous nerves—70 : 42.

Infrapatellar ramus of the saphenous nerve—70 : 45.

Cutaneous rami of the obturator nerve—70 : 39.

Bursa praepatellaris subcutanea—29 : 12.

Bursa praepatellaris subfascialis—29 : 13.

d. Deep fascia.

Fascia lata—27 : 49.

Iliotibial tract—27 : 50.

Lateral intermuscular septum of the thigh—27 : 51.

Medial intermuscular septum of the thigh—27 : 52.

4. FEMORAL SHEATH.

May be demonstrated by making an incision through the fascia lata beginning at the superior cornu of the falciform margin of the fossa ovalis and extending laterally to within about 2 cm. of the anterior superior iliac spine, reflecting the fascial flap laterally and removing the subjacent fat and deep subinguinal lymph glands; contents may be exposed by a longitudinal incision through the anterior wall of each of the three subdivisions or compartments of the sheath.

Deep subinguinal lymph glands—57: 4.

Femoral artery—51: 38.

Lumboinguinal nerve—70: 34.

Femoral vein—55: 61.

Femoral canal—27: 62.

The following structures may be palpated by introducing the little finger into the femoral canal.

Femoral ring—27: 63.

Femoral septum—27: 64.

Lacunar ligament—25: 42.

Inguinal ligament—25: 41.

Femoral vein—55: 61.

Pubic bone—15: 40.

Attention to the relations of femoral sheath and its contents is naturally accentuated in connection with conditions pertaining to femoral hernia.

5. FEMORAL TRIGONE AND ITS CONTENTS.

Exposed by removing the fascia lata from the anterior aspect of the proximal third of the thigh.

Femoral trigone—27: 59.

Fascia iliopectinea—27: 56.

Lacuna musculorum—27: 57.

Lacuna vasorum—27: 58.

Femoral artery—51: 38.

Superficial epigastric artery—51: 39.

Superficial circumflex iliac artery—51: 40.

External pudendal arteries—51: 41.

Inguinal rami**—51: 44.

Deep femoral artery—51: 45.

Medial circumflex femoral artery—51: 46.

Lateral circumflex femoral artery—51: 50.

Femoral vein—55: 61.

Superficial epigastric vein—55: 65.

Superficial circumflex iliac vein**—55: 68.

External pudendal veins**—55: 64.

Great saphenous vein—55: 66.

Accessory saphenous vein**—55: 67.

Deep femoral veins—55: 72.

Medial circumflex femoral veins—55: 69.

Lateral circumflex femoral veins—55: 70.

Lumboinguinal nerve—70: 34.

Lateral femoral cutaneous nerve—70: 36.

Femoral nerve—70: 41.

The following muscles are in relation to the floor and medial and lateral boundaries of the trigone:

Adductor longus muscle—27: 5.

Pectineus muscle—27: 4.

Iliopsoas muscle—26: 63.

Sartorius muscle—26: 76.

Fascia iliopectinea—27: 56.

6. ADDUCTOR CANAL AND ITS CONTENTS.

Adductor canal—27: 53.

May be exposed by making a longitudinal incision through the fascia lata remaining on the distal two-thirds of the anterior aspect of the thigh and reflecting the fascial flaps laterally and medially, but leaving intact the iliotibial tract; contents may be demonstrated by a longitudinal incision through the fibrous anterior wall of the canal.

Femoral artery—51: 38.

Arteria genu suprema—51: 59.

Saphenous ramus—51: 61.

Muscular rami—51: 60.

Articular rami—51: 62.

Femoral vein—55: 61.

Saphenous nerve—70: 44.

Tendinous [adductor] opening—27: 54.

7. MUSCLES OF THE FRONT OF THE THIGH.

Sartorius muscle—26: 76.

Tensor fasciae latae muscle—26: 70.

Iliotibial tract—27: 50.

Lateral intermuscular septum of the thigh—27: 51.

Medial intermuscular septum of the thigh—27: 52.

Quadriceps femoris muscle—26: 77.

Rectus femoris muscle—26: 78.

Bursa of rectus femoris muscle**—29: 7.

Vastus lateralis muscle—26: 79.

Vastus medialis muscle—27: 2.

Vastus intermedius muscle—27: 1.

May be exposed by making a transverse incision through the middle of the rectus femoris muscle and reflecting the distal end.

Articularis genu muscle—27: 3.

May be exposed by making a longitudinal incision through the vastus intermedius muscle.

Common tendon of the quadriceps femoris muscle—26: 77.

Medial patellar retinaculum—21: 19.

Lateral patellar retinaculum—21: 20.

VI. Medial Side of the Thigh

1. MUSCLES, NERVES, AND VESSELS.

Adductor longus muscle—27: 5.

Deep femoral artery—51: 45.

Exposed by detaching the adductor longus muscle at its origin and reflecting it toward its insertion, guarding, at the same time, the anterior ramus of the obturator nerve.

- First perforating artery—51: 53.
- Superior nutrient femoral artery—51: 54.
- Second perforating artery—51: 55.
- Third perforating artery—51: 56.
- Inferior nutrient femoral artery—51: 57.
- Pectineus muscle—27: 4.
- Pectineal fascia—27: 61.
- Bursa of pectineus muscle**—29: 10.
- Medial circumflex femoral artery—51: 46.
 - May be exposed by detaching the pectineus muscle at its origin and reflecting it toward its insertion.
- Superficial ramus—51: 47.
- Deep ramus—51: 48.
- Acetabular ramus—51: 49.
- Adductor brevis muscle—27: 7.
- Obturator nerve—70: 37.
- Posterior ramus—70: 40.
 - May be exposed by detaching the adductor brevis muscle at its origin and reflecting it toward its insertion.
- Anterior ramus—70: 38.
- Cutaneous ramus—70: 39.
- Gracilis muscle—27: 6.
- Proper bursa of sartorius muscle—29: 19.
- Bursa anserina—29: 20.
- Adductor minimus muscle—27: 9.
- Adductor magnus muscle—27: 8.
- Tendinous [adductor] opening—27: 54.
- The following structures may be demonstrated by detaching the adductor minimus and magnus muscles at their origins and reflecting them toward their insertions.
- Obturator externus muscle—27: 10.
- Psoas major muscle—26: 65.
- Iliac muscle—26: 64.
- Obturator artery—50: 64.
 - Demonstrated by the removal of the obturator externus muscle bit by bit.
- Anterior ramus—50: 66.
- Posterior ramus—50: 67.
- Artery of the acetabulum—50: 68.

VII. Hip Joint —

1. STRUCTURES IN RELATION TO THE HIP JOINT.

May be demonstrated by severing the femoral artery, vein, and nerve, detaching the iliopsoas muscle at its insertion, dividing the sartorius muscle near its origin and reflecting these structures together with the tensor fasciae latae muscle and exposing the capsule of the hip joint.

- Iliopectineal bursa—29: 8.
- Bursa of rectus femoris muscle**—29: 7.

- Subtendinous iliac bursa—29: 9.
- Articular capsule—20: 64.
- Iliofemoral ligament—20: 69.
- Ischiocapsular ligament—21: 1.
- Pubocapsular ligament—21: 2.
- Zona orbicularis—20: 68.
- Glenoid lip—20: 65.
- Transverse ligament of acetabulum—20: 66. — *bridge*.
- Ligamentum teres femoris—20: 67.
- Synovial membrane—18: 32.

VIII. Leg and Foot

1. GENERAL CHARACTERISTICS.

a. Subdivisions of leg and foot.

- Leg—5: 54.
 - Anterior and posterior surfaces—5: 55, 56.
 - Calf—5: 57.
 - Medial and lateral malleoli—5: 58, 59.
- Foot—5: 60.
 - Tarsus—5: 61.
 - Metatarsus—5: 62.
 - Dorsum and sole of foot—5: 63, 64.
 - Medial and lateral margins—5: 65, 66.
 - Heel—5: 67.
 - Digits of foot—5: 68.
 - Hallux—5: 69.
 - Digits II-IV—5: 70.
 - Smallest digit—5: 71.
 - Dorsal and plantar surfaces—5: 72, 73.
 - Medial and lateral margins—5: 74, 75.

b. Surface anatomy. (Pls. 9, 10.)

- Tuberosity of the tibia—16: 32.
- Anterior crest of the tibia—16: 37.
- Medial margin of the tibia—16: 36.
- Medial surface of the tibia—16: 33.
- Lateral malleolus—16: 57.
- Medial malleolus—16: 40.
- Tuberosity of the navicular bone—17: 23.
- Tuberosity of the fifth metatarsal bone—17: 36.

c. Regions. (Pls. 11, 12.)

- Anterior crural region—84: 26.
- Posterior crural region—84: 27.
- Sural region—84: 28.
- Lateral and medial crural regions—84: 29, 30.
- Lateral malleolar region—84: 31.

Medial malleolar region—84:32.

Lateral and medial retromalleolar regions—84:33, 34.
Calcaneal region—84:35.

Dorsal and plantar regions of foot—84:36, 37.

Digital regions of foot—84:38.

Dorsal digital regions—84:39.

Unguicular regions—84:40.

Plantar digital regions of foot—84:41.

2. ANTERIOR REGION OF LEG AND DORSUM OF FOOT.

a. Superficial fascia, cutaneous nerves and veins.

Skin incisions: (a) longitudinally along the medial line of the leg and dorsum of the foot to the base of the middle toe; (b) transversely across the ankle; (c) transversely across the dorsum of the foot at the bases of the toes; (d) a medial longitudinal incision along the dorsal surface of each digit.

Superficial fascia—23:36.

Dorsal digital veins of foot—56:15.

Intercapitular veins—56:11.

Common digital veins of foot—56:9.

Dorsal venous arch of foot—56:8.

Dorsal cutaneous venous network of foot**—56:7.

Small saphenous vein—56:1. (Origin only.)

Great saphenous vein—55:66. (Origin only.)

Saphenous nerve—70:44.

Medial cutaneous rami of leg**—70:46.

Lateral sural cutaneous nerve—70:58. (Terminal rami only.)

Superficial peroneal nerve—70:60.

Dorsal digital nerves—70:64.

Deep peroneal nerve—70:65. (Terminal rami only.)

Lateral dorsal cutaneous nerve—71:5.

b. Deep fascia.

Deep fascia of the leg—27:70.

Transverse crural ligament—27:73.

Dorsal fascia of foot—28:1.

—Cruciate ligament of the leg—27:75.

Superior peroneal retinaculum—27:76.

Inferior peroneal retinaculum—27:77.

Anterior [fibular] intermuscular septum—27:71.

Posterior [fibular] intermuscular septum—27:72.

c. Muscles in the anterior region of leg.

Exposed by making a longitudinal incision through the deep fascia on the front of the leg, extending from the knee to the transverse crural ligament and reflecting the deep fascia, but retaining intact the transverse and cruciate crural ligaments.

Tibialis anterior muscle—27:16.

Extensor digitorum longus muscle—27:17.

- Extensor hallucis longus muscle—27 : 19.
- Peroneus tertius muscle—27 : 18.
- Vagina tendinis musculi tibialis anterioris—29 : 29.
- Vagina tendinis musculi extensoris hallucis longus—29 : 30.
- Vagina tendinis musculi extensoris digitorum pedis longi—29 : 31.

d. Arteries.

- Anterior tibial artery—52 : 1.
 - Exposed by separating the extensor digitorum longus from the tibialis anterior muscle.
- Anterior tibial recurrent artery—52 : 3. (Origin only.)
- Lateral anterior malleolar artery—52 : 4.
- Medial anterior malleolar artery—52 : 5.
- Medial malleolar network—52 : 6.
- Lateral malleolar network—52 : 7.
- Perforating ramus of the peroneal artery—52 : 20. (Termination only.)
- Dorsal artery of foot—52 : 8.
 - Lateral tarsal artery—52 : 9.
 - Medial tarsal arteries—52 : 10.
 - Arcuate artery—52 : 11.
 - Dorsal network of foot—52 : 12.
 - Dorsal metatarsal arteries—52 : 13.
 - Dorsal digital arteries—52 : 14.
 - Deep plantar ramus—52 : 15.

e. Nerves.

- Deep peroneal nerve—70 : 65.
 - Muscular rami—70 : 66.
 - Dorsal digital nerves to lateral surface of hallux and to medial surface of digit II—70 : 67.
- Superficial peroneal nerve—70 : 60.
 - Muscular rami—70 : 61.
 - Medial dorsal cutaneous nerve—70 : 62.
 - Intermediate dorsal cutaneous nerve—70 : 63.
 - Dorsal digital nerves of the foot—70 : 64.

f. Muscles of the dorsum of the foot.

- Extensor hallucis brevis muscle—27 : 34.
- Extensor digitorum brevis muscle—27 : 35.
 - May be exposed by dividing the tendons of the muscles on the front of the leg at the level of the transverse cruciate ligament and reflecting the tendons toward their insertion.
- Dorsal interosseous muscles—27 : 47.
 - May be demonstrated by dividing the tendons of the extensor digitorum brevis muscle and reflecting the muscle toward its origin; completing, at the same time, the exposure of the lateral tarsal artery, arcuate artery, and terminal rami of the deep peroneal artery.

3. LATERAL OR PERONEAL REGION OF LEG.

a. Deep fascia and muscles.

Anterior fibular intermuscular septum—27 : 71.

May be demonstrated by making a longitudinal incision through the deep fascia of this region and reflecting the fascia, retaining intact, however, the peroneal retinacula.

Posterior fibular intermuscular septum—27 : 72.

Peroneus longus muscle—27 : 20.

Peroneus brevis muscle—27 : 21.

Superior retinaculum of the peroneal muscles—27 : 76.

Inferior retinaculum of the peroneal muscles—27 : 77.

Common sheath of tendons of the peroneal muscles—29 : 35.

Subcutaneous bursa of the lateral malleolus**—29 : 27.

b. Nerves.

Common peroneal nerve—70 : 56.

Superficial peroneal nerve—70 : 60.

Muscular rami—70 : 61.

Deep peroneal nerve—70 : 65.

4. MEDIAL REGION OF LEG.

Great saphenous vein—55 : 66.

Saphenous nerve—70 : 44.

Infrapatellar ramus—70 : 45.

Medial cutaneous rami of leg—71 : 46.

Tendons of insertion of the sartorius, gracilis and semitendinosus muscles.

Tibial collateral ligament of knee joint—21 : 14.

Medial inferior genicular artery—51 : 69.

5. POSTERIOR REGION OF LEG AND HEEL.

a. Fascia, superficial veins, and cutaneous nerves.

Skin incisions: (a) longitudinally in the middle line of the leg from the popliteal space to the heel; (b) transversely at the distal end (a) and extending 5 cm. along the medial and lateral margins of the foot.

Small saphenous vein—56 : 1.

Great saphenous vein—55 : 66.

Sural nerve—71 : 3.

Medial sural cutaneous nerve—71 : 2.

Peroneal anastomotic ramus—70 : 59.

Lateral sural cutaneous nerve—70 : 58.

Posterior femoral cutaneous nerve—70 : 51.

Medial crural cutaneous rami of the saphenous nerve—70 : 46.

Anterior femoral cutaneous nerves—70 : 43. (Medial terminal rami only.)

Deep fascia—27: 74.

Lacinate ligament—27: 74.

b. Muscles; superficial group.

May be exposed by dividing the deep fascia in the median line from the popliteal fossa to the heel and reflecting the fascia, but retaining intact the lacinate ligament.

Triceps muscle of the calf—27: 22.

Gastrocnemius muscle—27: 23.

Lateral head—27: 24.

Medial head—27: 25.

Lateral bursa of gastrocnemius muscle—29: 24.

Medial bursa of gastrocnemius muscle—29: 25.

Soleus muscle—27: 26.

May be exposed by detaching the gastrocnemius at its attachment to the calcaneal tendon and reflecting it proximally.

Tendinous arch of the soleus muscle—27: 27.

Plantaris muscle—27: 29.

Calcaneal tendon (of Achilles)—27: 28.

Subcutaneous calcaneal bursa—29: 29.

Bursa of calcaneal tendon—29: 40.

May be demonstrated by dividing the calcaneal tendon a few centimeters from its insertion and reflecting the tendon.

c. Muscles; deep group.

Structures exposed by detaching the soleus muscle at its origin from the tibia, separating it from the tendinous arch, reflecting the muscle laterally, and making a longitudinal incision through the deep transverse fascia or septum between the superficial and deep group of muscles of the back of the leg.

Popliteus muscle—27: 30.

Bursa of popliteus muscle**—29: 22.

Flexor digitorum longus muscle—27: 32.

Sheath of tendons of flexor digitorum longus muscle—29: 32.

Tibialis posterior muscle—27: 31.

Sheath of tendon of tibialis posterior muscle—29: 33.

Flexor hallucis longus muscle—27: 33.

Sheath of tendon of flexor hallucis longus muscle—29: 34.

d. Arteries.

Popliteal artery—51: 63. (Termination only.)

Anterior tibial artery—52: 1. (Origin only.)

Posterior tibial recurrent artery—52: 2.

Anterior tibial lymph gland—57: 6.

Posterior tibial artery—52: 16.

Fibular ramus—52: 17.

Peroneal artery—52: 18.

Nutrient artery of the fibula—52: 19.

- Perforating ramus—52: 20.
- Communicating ramus—52: 21.
- Lateral posterior malleolar artery—52: 22.
- Lateral calcaneal rami—52: 23.
- Nutrient artery of the tibia—52: 24.
- Medial posterior malleolar artery—52: 25.
- Medial calcaneal rami—52: 26.
- Network of heel**—52: 27.

e. Nerves.

- Tibial nerve—70: 68.
- Muscular rami—70: 69.
- Interosseous nerve of leg—71: 1.
- Medial sural cutaneous nerve—71: 2.
- Sural nerve—71: 3.

f. Lacinate ligament—27: 74.

6. PLANTAR REGION OF THE FOOT.

a. Fascia and superficial veins.

Skin incisions: (a) longitudinally along the middle line of the sole; (b) transversely across the sole at the clefts of the toes; (c) longitudinally along the middle line of each toe.

- Superficial fascia—23: 36.
- Digital plantar veins—56: 16.
- Plantar venous arch—56: 13.
- Intercapitular veins—56: 11.
- Plantar venous network**—56: 12.
- Medial calcaneal rami of the tibial nerve—71: 6.
- Plantar aponeurosis—28: 2.
- Transverse fasciculi—28: 3.

b. Muscles; superficial layer.

- Abductor hallucis muscle—27: 36.
- Flexor digitorum brevis muscle—27: 44.
- Vaginal ligaments—28: 6.
- Annular ligaments—28: 5.
- Cruciate ligaments—28: 7.
- Digital sheaths of tendons of foot—29: 44.
- Abductor digiti quinti muscle—27: 41.

c. Plantar arteries.

May be exposed by detaching the preceding muscles at their origins and reflecting them toward their insertions (noting at the same time their nerve supply).

- Medial plantar artery—52: 28.
- Superficial ramus—52: 30.
- Deep ramus—52: 29.
- Lateral plantar artery—52: 31.

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d. Plantar nerves.

- Medial plantar nerve—71: 7.
- Common digital plantar nerves—71: 8.
- Proper digital plantar nerves—71: 9.
- Lateral plantar nerve—71: 10.
- Superficial ramus—71: 11.
- Common digital plantar nerves—71: 12.
- Proper digital plantar nerves—71: 13.

e. Muscles; second layer of muscles and tendons.

- Tendons of the flexor digitorum longus muscle—27: 32.
- Quadratus plantae muscle—27: 45.
- Lumbricales muscles—27: 46.
- Bursae of lumbricales muscles**—29: 43.
- Tendon of the flexor hallucis longus muscle—27: 33.

f. Muscles; third layer.

May be exposed by dividing the tendons of the flexor digitorum longus and flexor hallucis longus muscles, the heads of the quadratus plantae muscle, and the plantar vessels and nerves near the os calcaneum and reflecting these structures distally (noting at the same time the nerve supply to the lumbricales muscles).

- Flexor hallucis brevis muscle—27: 37.
- Adductor hallucis muscle—27: 38.
- Oblique head—27: 39.
- Transverse head—27: 40.
- Flexor digiti quinti brevis muscle—27: 42.
- Opponens digiti quinti muscle—27: 43.

g. Plantar arch and deep division of the lateral plantar nerve.

May be demonstrated by detaching the flexor hallucis brevis muscle and the oblique head of the adductor hallucis muscle at their origins and reflecting them distally (identifying at the same time the nerve supply of the latter muscle).

- Plantar arch—52: 32.
- Plantar metatarsal arteries—52: 33.
- Perforating rami—52: 34.
- Digital plantar arteries—52: 35.
- Deep branch of lateral plantar nerve—71: 14.

h. Interosseous muscles and deep tendons.

- Transverse ligament of the heads of the metatarsal bones—22: 21.
- Plantar interosseous muscles—27: 48.
- Dorsal interosseous muscles—27: 47.
- Tendon of tibialis posterior muscle—27: 31.
- Tendon of peroneus longus muscle—27: 20.
- Plantar sheath of tendon of peroneus longus muscle—29: 41.

7. ARTICULATIONS OF THE LEG AND FOOT.

a. *Knee joint*—21: 3.

- Articular capsule—21: 4.
- Fibular collateral ligament—21: 13.
- Tibial collateral ligament—21: 14.
- Oblique popliteal ligament—21: 15.
- Arcuate popliteal ligament—21: 16.
- Ligament of the patella—21: 18.
- Medial patellar retinaculum—21: 19.
- Lateral patellar retinaculum—21: 20.

The following structures may be exposed by making a longitudinal incision on either side of the patella and patellar ligament, dividing the quadriceps extensor muscle about 8 cm. above the patella, and reflecting the patella and common extensor tendon distally.

- Patellar synovial fold—21: 11.
- Deep infrapatellar bursa—29: 17.
- Lateral meniscus—21: 5.
- Medial meniscus—21: 6.
- Transverse ligament of the knee—21: 7.
- Cruciate ligaments of the knee—21: 8.
- Anterior cruciate ligament—21: 9.
- Posterior cruciate ligament—21: 10.
- Synovial membrane—18: 32.

b. *Ankle joint*—21: 29.

- Articular capsule—21: 30.
- Deltoid ligament—21: 31.
- Tibionavicular ligament—21: 32.
- Calcaneotibial ligament—21: 33.
- Anterior talotibial ligament—21: 34.
- Posterior talotibial ligament—21: 35.
- Anterior talofibular ligament—21: 36.
- Posterior talofibular ligament—21: 37.
- Calcaneofibular ligament—21: 38.
- Synovial membrane—18: 32.

c. *Tibiofibular articulations.*

- Tibiofibular articulation—21: 21.
- Articular capsule—21: 22.
- Ligaments of the head of the fibula—21: 23.
- Interosseous membrane—21: 24.
- Tibiofibular syndesmosis—21: 25.
- Anterior ligament of the lateral malleolus—21: 26.
- Posterior ligament of the lateral malleolus—21: 27.

d. *Intertarsal articulations*—21: 39.

- Talocalcaneal articulation—21: 41.
- Articular capsule—21: 42.
- Lateral talocalcaneal ligament—21: 43.

- Medial talocalcaneal ligament—21: 44.
- Anterior talocalcaneal ligament—21: 45.
- Posterior talocalcaneal ligament—21: 46.
- Talocalcaneonavicular articulation—21: 40.
- Dorsal talonavicular ligament—21: 58.
- Articular capsule of the talonavicular part of the joint—21: 49.
- The examination of the articulation may be completed by severing the ligaments holding the talus in place and removing the talus.
- Interosseous talocalcaneal ligament—21: 54.
- Plantar calcaneonavicular ligament—21: 70.
- Calcaneonavicular part of the bifurcate ligament—21: 62.
- Dorsal calcaneonavicular ligament—21: 64.
- Chopart's transverse articulation of the tarsus—21: 47.
- Talonavicular articulation—21: 48.
- Note that this is a part of the talocalcaneonavicular articulation; attention has already been directed to its articular capsule in connection with the talocalcaneonavicular articulation.
- Calcaneocuboid articulation—21: 50.
- Articular capsule—21: 51.
- Plantar calcaneocuboid ligament—21: 69.
- Long plantar ligament—21: 67.
- Not confined entirely to this articulation.
- Cuneonavicular articulation—21: 52.
- Dorsal navicular cuneiform ligaments**—21: 65.
- Plantar navicular cuneiform ligaments**—22: 2.
- The following ligaments connect the cuboid, navicular and cuneiform bones:
 - Dorsal cuboideonavicular ligament**—21: 60.
 - Dorsal cuneocuboid ligament**—21: 59.
 - Plantar cuboideonavicular ligament**—22: 3.
 - Plantar cuneocuboid ligament**—22: 5.
 - Plantar intercuneiform ligaments**—22: 4.
 - Interosseous cuneocuboid ligament**—21: 55.
 - Interosseous intercuneiform ligaments**—21: 56.

e. Tarsometatarsal articulations—22: 6.

- Articular capsules—22: 7.
- Dorsal tarsometatarsal ligaments**—22: 8.
- Plantar tarsometatarsal ligaments**—22: 9.
- Interosseous cuneometatarsal ligaments**—22: 10.

f. Intermetatarsal articulations—22: 11.

- Articular capsules—22: 12.
- Dorsal ligaments of the bases of the metatarsal bones**—22: 14.

Plantar ligaments of the bases of the metatarsal bones**—
22:15.

Interosseous ligaments of the bases of the metatarsal
bones**—22:13.

Interosseous spaces of metatarsus**—22:16.

g. Metatarsophalangeal articulations—22:17.

Articular capsules—22:18.

Collateral ligaments**—22:19.

Plantar accessory ligaments**—22:20.

Transverse ligaments of the heads of the metatarsal
bones**—22:21.

h. Articulations of the toes—22:22.

Articular capsules—22:23.

Collateral ligaments**—22:24.

PART II

SYSTEMATIC ANATOMY

PART II. SYSTEMATIC ANATOMY¹

1 NOMINA ANATOMICA

2 TERMINI, SITUUM ET DIRECTIONEM PARTIUM CORPORIS INDICANTES

3 *Termini generales*

4 Verticalis	13 Anterior	22 Longitudinalis
5 Horizontalis	14 Medius	23 Transversus
6 Medianus	15 Posterior	24 Cranialis
7 Sagittalis	16 Ventralis	25 Rostralis*
8 Frontalis	17 Dorsalis	26 Caudalis
9 Transversalis	18 Internus	27 Superior
10 Medialis	19 Externus	28 Inferior
11 Intermedius	20 Dexter	29 Superficialis [sub-
12 Lateralis	21 Sinister	30 Profundus limis]

31 *Termini ad extremitates spectantes*

32 Proximalis	35 Ulnaris
33 Distalis	36 Tibialis
34 Radialis	37 Fibularis

¹ The following arrangement of terms is based on that of the B N A system as published by His in the *Archiv für Anatomie und Entwicklungsgeschichte, Supplemental Band*, 1895.

All the terms have been left in their original Latin form. Certain obvious errors in the original lists (cf. also Eycleshymer's *Anatomical Names*, p. 2, 1917) have been corrected as follows:

- P. 20, Nos. 34, 35 corrected to read Ligg. instead of Lig.
- P. 23, Nos. 55, 56, 57 corrected to read MM. instead of M.
- P. 25, No. 49, corrected to read [Spegeli] instead of [Spige].
- P. 29, No. 4, corrected to read obturatoris instead of obturatorii.
- P. 34, No. 65, corrected to read fibrosa instead of fibrosus.
- P. 53, Nos. 74, 75, 76 corrected to read Vv. instead of V.
- P. 55, No. 51, corrected to read V. instead of Vv.
- P. 68, No. 65, corrected to read Nn. instead of N.

For the significance of brackets and asterisks see footnote, Part I, page 1. The prefixed numerals in Part II merely indicate the serial position of each term for cross-reference purposes.

1 TERMINI GENERALES

2 Accessorius	35 Corona	68 Geniculum
3 Acinus	36 Corpus	69 Genu
4 Aditus	37 Corpuseculum	70 Glandula
5 Ala	38 Crista	71 Glomerulus
6 Alveolus	39 Crus	72 Glomus
7 Ampulla	40 Decussatio	73 Hilus
8 Angulus	41 Dorsum	74 Humor
9 Ansa	42 Ductulus	75 Junctura
10 Antrum	43 Ductus	76 Impressio
11 Apertura	44 Eminentia	77 Incisura
12 Apex	45 Endothelium	78 Infundibulum
13 Appendix	46 Epithelium	79 Intestinum
14 Arcus	47 Extremitas	80 Isthmus
15 Area	48 Facies	81 Labium
16 Basis	49 Fascia	82 Lacuna
17 Brachium	50 Fasciculus	83 Lamina
18 Canaliculus	51 Fibra	84 Latus
19 Canalis	52 Fibrocartilago	85 Ligamentum
20 Capsula	53 Filum	86 Limbus
21 Caput	54 Fissura	87 Limen
22 Capitulum	55 Flexura	88 Linea
23 Cartilago	56 Folium	89 Liquor
24 Caruncula	57 Folliculus	90 Lobulus
25 Cauda	58 Foramen	91 Lobus
26 Caverna	59 Formatio	92 Macula
27 Cavum	60 Fornix	93 Margo
28 Cellula	61 Fossa	94 Massa
29 Circulus	62 Fossula	95 Meatus
30 Cisterna	63 Fovea	96 Medulla
31 Collum	64 Foveola	97 Membrana
32 Columna	65 Frenulum	98 Membrum
33 Commissura	66 Fundus	99 Mucus
34 Cornu	67 Funiculus	100 Musculus

1 Nervus	25 Regio	49 Trochlea
2 Nodulus	26 Rete	50 Truncus
3 Nucleus	27 Rima	51 Tuber
4 Organon	28 Rundimentum	52 Tuberculum
5 Orificium	29 Septulum	53 Tubulus
6 Os [oris]	30 Septum	54 Tunica
7 Os [ossis]	31 Sinus	55 Tunica propria
8 Ostium	32 Spatium	56 Umbo
9 Papilla	33 Spina	57 Uvula
10 Parenchyma	34 Stratum	58 Vagina
11 Paries	35 Stria	59 Vallecule
12 Perichondrium	36 Stroma	60 Vallum
13 Periosteum	37 Substantia	61 Valvula
14 Plexus	38 Succus	62 Vas
15 Plica	39 Sulcus	63 Velum
16 Polus	40 Taenia	64 Vertex
17 Processus	41 Tegmen	65 Vesica
18 Prominentia	42 Tela	66 Vesicula
19 Punctum	43 Tela conjunctiva	67 Vestibulum
20 Radix	44 Tela elastica	68 Villus
21 Ramulus	45 Torus	69 Viscus [viscera]
22 Ramus	46 Trabecula	70 Vortex
23 Raphe	47 Tractus	71 Zona
24 Recessus	48 Trigonum	

1 PARTES CORPORIS HUMANI

- | | |
|----------------------------|-------------------------|
| 2 Caput | 4 Truncus |
| 3 Collum | 5 Extremitates |
| | 6 CAPUT |
| | 7 <i>Cranium</i> |
| 8 Vertex | 12 Tempora |
| 9 Sinciput | 13 Auris |
| 10 Frons | 14 Auricula |
| 11 Occiput | |
| | 15 <i>Facies</i> |
| 16 Oculus | 27 Os |
| 17 Palpebra superior | 28 Sulcus nasolabialis |
| 18 Palpebra inferior | 29 Philtrum |
| 19 Rima palpebrarum | 30 Labium superius |
| 20 Bulbus oculi | 31 Labium inferius |
| 21 Supercilium | 32 Rima oris |
| 22 Sulcus infrapalpebralis | 33 Cavum oris |
| 23 Nasus | 34 Lingua |
| 24 Dorsum nasi | 35 Fauces |
| 25 Apex nasi | 36 Bucca [Mala] |
| 26 Ala nasi | 37 Sulcus mentolabialis |
| | 38 Mentum |
| | 39 COLLUM |
| 40 Cervix | 43 Pharynx |
| 41 Larynx | 44 Trachea |
| 42 Prominentia laryngea | 45 Oseophagus |
| | 46 TRUNCUS |
| 47 Thorax | 52 Dorsum |
| 48 Cavum thoracis | 53 Columna vertebralis |
| 49 Pectus | 54 Canalis spinalis |
| 50 Mamma | |
| 51 Papilla mammae | 55 Abdomen |
| 56 Cavum abdominis | 59 Latus |
| 57 Scrobiculus cordis | 60 Lumbus |
| 58 Umbilicus | 61 Inguen |

1 *Pelvis*

- | | |
|------------------|-------------|
| 2 Cavum pelvis | 6 Anus |
| 3 Mons pubis | 7 Crena ani |
| 4 Coxa | 8 Perineum |
| 5 Nates [Clunes] | |

9 EXTREMITAS SUPERIOR

- | | |
|---------------------------------|------------------------------|
| 10 Axilla | 27 Manus |
| 11 Plica axillaris anterior | 28 Carpus |
| 12 Plica axillaris posterior | 29 Metacarpus |
| 13 Acromion | 30 Dorsum manus |
| 14 Brachium | 31 Vola manus [Palma] |
| 15 Facies anterior | 32 Thenar |
| 16 Facies posterior | 33 Hypothenar |
| 17 Facies lateralis | 34 Digiti manus |
| 18 Facies medialis | 35 Pollex [Digitus I] |
| 19 Sulcus bicipitalis lateralis | 36 Index [Digitus II] |
| 20 Sulcus bicipitalis medialis | 37 Digitus medius [D. III] |
| 21 Cubitus | 38 Digitus annularis [D. IV] |
| 22 Antibrachium | 39 Digitus minimus [D. V] |
| 23 Facies dorsalis | 40 Facies dorsales |
| 24 Facies volaris | 41 Facies volares |
| 25 Margo radialis | 42 Margines radiales |
| 26 Margo ulnaris | 43 Margines ulnares |

44 EXTREMITAS INFERIOR

- | | |
|------------------------|---------------------------|
| 45 Femur | 61 Tarsus |
| 46 Facies anterior | 62 Metatarsus |
| 47 Facies posterior | 63 Dorsum pedis |
| 48 Facies lateralis | 64 Planta |
| 49 Facies medialis | 65 Margo pedis lateralis |
| 50 Sulcus glutaeus | 66 Margo pedis medialis |
| 51 Genu | 67 Calx |
| 52 Poples | 68 Digiti pedis |
| 53 Patella | 69 Hallux [Digitus I] |
| 54 Crus | 70 Digiti II-IV |
| 55 Facies anterior | 71 Digitus minimus [D. V] |
| 56 Facies posterior | 72 Facies dorsales |
| 57 Sura | 73 Facies plantares |
| 58 Malleolus lateralis | 74 Margines laterales |
| 59 Malleolus medialis | 75 Margines mediales |
| 60 Pes | |

1 OSTEOLOGIA

- | | | |
|----------------------------------|-------------------------------------|----------------------|
| 2 Os longum | 9 Apophysis | 14 Cavum medullare |
| 3 Os breve | 10 Facies articularis | 15 Medulla ossium |
| 4 Os planum | 11 Substantia com- | 16 Medulla ossium |
| 5 Os pneumaticum | pacta | flava |
| 6 Epiphysis | 12 Substantia corti- | 17 Medulla ossium |
| 7 Diaphysis | calis | rubra |
| 8 Synchondrosis | 13 Substantia spongi- | 18 Foramen nutricium |
| epiphyseos* | osa | 19 Canalis nutricius |
| | | |
| 20 COLUMNA VERTEBRALIS | | |
| 21 Vertebrae cervicales | 42 Tuberculum caroticum [verte- | |
| 22 Vertebrae thoracales | brae cervicalis VI] | |
| 23 Vertebrae lumbales | 43 Foramen transversarium | |
| 24 Vertebrae sacrales | 44 Tuberculum posterius [verte- | |
| 25 Vertebrae coccygeae | brarum cervicalium] | |
| 26 Corpus vertebrae | 45 Processus articulares superiores | |
| 27 Fovea costalis superior | 46 Facies articulares superiores | |
| 28 Fovea costalis inferior | 47 Processus articulares inferiores | |
| 29 Canalis vertebralis | 48 Facies articulares inferiores | |
| 30 Foramen vertebrale | 49 Processus costarius | |
| 31 Arcus vertebrae | 50 Processus accessorius [verte- | |
| 32 Radix arcus vertebrae | brarum lumbalium] | |
| 33 Incisura vertebralis superior | 51 Processus mamillaris | |
| 34 Incisura vertebralis inferior | | |
| 35 Foramen intervertebrale | 52 <i>Atlas</i> | |
| 36 Sulcus n. spinalis | 53 Massa lateralis | |
| 37 Processus spinosus | 54 Arcus anterior | |
| 38 Vertebra prominens | 55 Tuberculum anterius | |
| 39 Processus transversus | 56 Foveae articulares superiores | |
| 40 Fovea costalis transversalis | 57 Facies articulares inferiores | |
| 41 Tuberculum anterius [verte- | 58 Fovea dentis | |
| brarum cervicalium] | 59 Arcus posterior | |
| | 60 Sulcus arteriae vertebralis | |
| | 61 Tuberculum posterius | |

- | | |
|--|-----------------------------------|
| 1 <i>Epistropheus</i> | 39 Collum costae |
| 2 Dens | 40 Crista colli costae |
| 3 Facies articularis anterior | 41 Angulus costae |
| 4 Facies articularis posterior | 42 Tuberculum scaleni [Lisfranci] |
| | 43 Sulcus subclaviae |
| 5 <i>Os sacrum</i> | 44 Tuberositas costae II |
| 6 Facies dorsalis | 45 Sulcus costae |
| 7 Facies pelvina | |
| 8 Basis oss. sacri | 46 <i>Sternum</i> |
| 9 Processus articularis superior | 47 Manubrium sterni |
| 10 Promontorium | 48 Angulus sterni |
| 11 Pars lateralis | 49 Synchondrosis sternalis |
| 12 Facies auricularis | 50 Corpus sterni |
| 13 Tuberositas sacralis | 51 Planum sternale |
| 14 Foramina intervertebralia | 52 Processus xiphoideus |
| 15 Foramina sacralia anteriora | 53 Incisura clavicularis |
| 16 Lineae transversae | 54 Incisura jugularis |
| 17 Foramina sacralia posteriora | 55 Incisurae costales |
| 18 Crista sacralis media | 56 (Ossa suprasternalis) |
| 19 Cristae sacrales laterales | |
| 20 Cristae sacrales articulares | 57 <i>Thorax</i> |
| 21 Cornua sacralia | 58 Cavum thoracis |
| 22 Canalis sacralis | 59 Apertura thoracis superior |
| 23 Hiatus sacralis | 60 Apertura thoracis inferior |
| 24 Apex oss. sacri | 61 Arcus costarum |
| | 62 Spatia intercostalia |
| 25 <i>Os coccygis</i> | 63 Angulus infrasternalis |
| 26 Cornua coccygea | 64 Sulcus pulmonalis |
| | |
| 27 <i>THORAX</i> | 65 <i>OSSA CRANII</i> |
| 28 <i>Costae</i> | 66 <i>Os basilare</i> |
| 29 Costae verae | 67 <i>Os occipitale</i> |
| 30 Costae spuriae | 68 Foramen occipitale magnum |
| 31 Os costale | 69 Pars basilaris |
| 32 Cartilago costalis | 70 Sulcus petrosus inferior |
| 33 Capitulum costae | 71 Pars lateralis |
| 34 Facies articularis capituli costae | 72 Squama occipitalis |
| 35 Crista capituli | 73 Margo mastoideus |
| 36 Corpus costae | 74 Margo lambdoideus |
| 37 Tuberculum costae | 75 (Os interparietale) |
| 38 Facies articularis tuberculi costae | |

- 1 Clivus
- 2 Tuberculum pharyngeum
- 3 Condylus occipitalis
- 4 Canalis condyloideus
- 5 Canalis hypoglossi
- 6 Tuberculum jugulare
- 7 Incisura jugularis
- 8 Processus jugularis
- 9 Fossa condyloidea
- 10 Processus intrajugularis
- 11 Planum occipitale
- 12 Planum nuchale
- 13 Protuberantia occipitalis externa
- 14 (Torus occipitalis)
- 15 Crista occipitalis externa
- 16 Linea nuchae suprema
- 17 Linea nuchae superior
- 18 Linea nuchae inferior
- 19 Eminencia cruciata
- 20 Protuberantia occipitalis interna
- 21 Sulcus sagittalis
- 22 Sulcus transversus
- 23 (Processus paramastoideus)
- 24 *Os sphenoidale*
- 25 Corpus
- 26 Sella turcica
- 27 Fossa hypophyseos
- 28 Dorsum sellae
- 29 Tuberculum sellae
- 30 Processus clinoideus medius
- 31 Processus clinoideus posterior
- 32 Sulcus caroticus
- 33 Lingula sphenoidalis
- 34 Crista sphenoidalis
- 35 Rostrum sphenoidale
- 36 Sinus sphenoidalis
- 37 Septum sinuum sphenoidalium
- 38 Apertura sinus sphenoidalis
- 39 Conchae sphenoidales
- 40 Clivus
- 41 Ala parva
- 42 Sulcus chiasmatis
- 43 Foramen opticum
- 44 Processus clinoideus anterior
- 45 Fissura orbitalis superior
- 46 Ala magna
- 47 Facies cerebralis
- 48 Facies temporalis
- 49 Facies sphenomaxillaris
- 50 Facies orbitalis
- 51 Margo zygomaticus
- 52 Margo frontalis
- 53 Angulus parietalis
- 54 Margo squamosus
- 55 Crista infratemporalis
- 56 Foramen rotundum
- 57 Foramen ovale
- 58 Foramen spinosum
- 59 Spina angularis
- 60 Processus pterygoideus
- 61 Lamina lateralis processus pterygoidei
- 62 Lamina medialis processus pterygoidei
- 63 Fissura pterygoidea
- 64 Fossa scaphoidea
- 65 Processus vaginalis
- 66 Hamulus pterygoideus
- 67 Sulcus hamuli pterygoidei
- 68 Fossa pterygoidea
- 69 Canalis pterygoideus [Vidii]
- 70 Canalis pharyngeus
- 71 Canalis basipharyngeus
- 72 Sulcus tubae auditivae
- 73 Sulcus pterygopalatinus
- 74 (Processus pterygospinosus [Civinini])
- 75 *Os temporale*
- 76 Pars mastoidea
- 77 Margo occipitalis
- 78 Processus mastoideus
- 79 Incisura mastoidea
- 80 Sulcus sigmoideus

- 1 Sulcus a. occipitalis
- 2 Foramen mastoideum
- 3 Pars petrosa [Pyramis]
- 4 Facies anterior pyramidis
- 5 Facies posterior pyramidis
- 6 Facies inferior pyramidis
- 7 Apex pyramidis
- 8 Angulus superior pyramidis
- 9 Angulus anterior pyramidis
- 10 Angulus posterior pyramidis
- 11 Sulcus petrosus superior
- 12 Tegmen tympani
- 13 Eminentia arcuata
- 14 Canalis facialis [Falloppii]
- 15 Hiatus canalis facialis
- 16 Geniculum canalis facialis
- 17 Sulcus n. petrosi superficialis majoris
- 18 Sulcus n. petrosi superficialis minoris
- 19 Impressio trigemini
- 20 Porus acusticus internus
- 21 Meatus acusticus internus
- 22 Fossa subarcuata
- 23 Aquaeductus vestibuli
- 24 Apertura externa aquaeductus vestibuli
- 25 Sulcus petrosus inferior
- 26 Incisura jugularis
- 27 Processus intrajugularis
- 28 Fossa jugularis
- 29 Canaliculus mastoideus
- 30 Sulcus canaliculi mastoidei
- 31 Processus styloideus
- 32 Vagina processus styloidei
- 33 Foramen stylomastoideum
- 34 Fossula petrosa
- 35 Canaliculus tympanicus
- 36 Sulcus tympanicus
- 37 Apertura inferior canaliculi tympanici
- 38 Apertura superior canaliculi tympanici
- 39 Canaliculus cochleae
- 40 Apertura externa canaliculi cochleae
- 41 Canalis caroticus
- 42 Canaliculi caroticotympanici
- 43 Canalis musculotubarius
- 44 Semicanalis m. tensoris tympani
- 45 Semicanalis tubae auditivae
- 46 Septum canalis musculotubarii
- 47 Cavum tympani (v. Organon auditus)
- 48 Canaliculus chordae tympani
- 49 Fissura petrotympanica [Glaseri]
- 50 Fissura petrosquamosa
- 51 Pars tympanica
- 52 Annulus tympanicus*
- 53 Meatus acusticus externus
- 54 (Spina supra meatum)
- 55 Fissura tympanomastoidea
- 56 Spina tympanica major
- 57 Spina tympanica minor
- 58 Porus acusticus externus
- 59 Squama temporalis
- 60 Margo parietalis
- 61 Incisura parietalis
- 62 Margo sphenoidalis
- 63 Facies temporalis
- 64 Processus zygomaticus
- 65 Fossa mandibularis
- 66 Facies articularis
- 67 Tuberculum articulare
- 68 Facies cerebralis
- 69 Sulcus a. temporalis mediae
- 70 Os parietale
- 71 Facies cerebralis
- 72 Facies parietalis
- 73 Margo occipitalis
- 74 Margo squamosus
- 75 Margo frontalis
- 76 Margo sagittalis
- 77 Angulus frontalis
- 78 Angulus occipitalis
- 79 Angulus sphenoidalis
- 80 Angulus mastoideus
- 81 Foramen parietale

- 1 Tuber parietale
- 2 Linea temporalis inferior
- 3 Linea temporalis superior
- 4 Sulcus sagittalis
- 5 Sulcus transversus
- 6 *Os frontale*
- 7 Squama frontalis
- 8 Facies frontalis
- 9 Margo supraorbitalis
- 10 Pars orbitalis
- 11 Incisura ethmoidalis
- 12 Pars nasalis
- 13 Spina frontalis
- 14 Margo nasalis
- 15 Margo parietalis
- 16 Processus zygomaticus
- 17 Facies temporalis
- 18 Linea temporalis
- 19 Tuber frontale
- 20 Arcus superciliaris
- 21 Glabella
- 22 Foramen sive Incisura supra-orbitalis
- 23 Incisura sive Foramen frontale
- 24 Facies orbitalis
- 25 (Spina trochlearis)
- 26 Fovea trochlearis
- 27 Foramen ethmoidale anterius
- 28 Foramen ethmoidale posterius
- 29 Fossa glandulae lacrimalis
- 30 Facies cerebralis
- 31 Crista frontalis
- 32 Sulcus sagittalis
- 33 Foramen caecum
- 34 Sinus frontalis
- 35 Septum sinuum frontium
- 36 *Os ethmoidale*
- 37 Lamina cribrosa
- 38 Crista galli
- 39 Processus alaris
- 40 Lamina perpendicularis
- 41 Labyrinthus ethmoidalis
- 42 Cellulae ethmoidales
- 43 Infundibulum ethmoidale
- 44 Hiatus semilunaris
- 45 Bulla ethmoidalis
- 46 Lamina papyracea
- 47 Foramina ethmoidalia
- 48 (Concha nasalis suprema)
- 49 Concha nasalis superior
- 50 Concha nasalis media
- 51 Processus uncinatus
- 52 *Concha nasalis inferior*
- 53 Processus lacrimalis
- 54 Processus maxillaris
- 55 Processus ethmoidalis
- 56 *Os lacrimale*
- 57 Crista lacimalis posterior
- 58 Sulcus lacrimalis
- 59 Hamulus lacrimalis
- 60 Fossa sacci lacrimalis
- 61 *Os nasale*
- 62 Foramina nasalia
- 63 Sulcus ethmoidalis
- 64 *Vomer*
- 65 Ala vomeris
- 66 *Ossa faciei*
- 67 *Maxilla*
- 68 Corpus maxillae
- 69 Facies anterior
- 70 Facies nasalis
- 71 Facies orbitalis
- 72 Facies infratemporalis
- 73 Sinus maxillaris
- 74 Margo infraorbitalis
- 75 Canalis infraorbitalis
- 76 Sulcus infraorbitalis
- 77 Foramen infraorbitale
- 78 Sutura infraorbitalis
- 79 Fossa canina

- 1 (Fossa praeasalis)
- 2 Incisura nasalis
- 3 Tuber maxillare
- 4 Foramina alveolaria
- 5 Canales alveolares
- 6 Planum orbitale
- 7 Margo lacrimalis
- 8 Sulcus lacrimalis
- 9 Canalis nasolacrimalis
- 10 Crista conchalis
- 11 Processus frontalis
- 12 Crista lacrimalis anterior
- 13 Incisura lacrimalis
- 14 Crista ethmoidalis
- 15 Processus zygomaticus
- 16 Processus palatinus
- 17 Crista nasalis
- 18 Spina nasalis anterior
- 19 Os incisivum*
- 20 Canalis incisivus
- 21 Sutura incisiva
- 22 Spinae palatinae
- 23 Sulci palatini
- 24 Processus alveolaris
- 25 Limbus alveolaris
- 26 Alveoli dentales
- 27 Septa interalveolaria
- 28 Juga alveolaria
- 29 Hiatus maxillaris
- 30 Foramen incisivum
- 31 *Os palatinum*
- 32 Pars perpendicularis
- 33 Facies nasalis
- 34 Facies maxillaris
- 35 Incisura sphenopalatina
- 36 Sulcus pterygopalatinus
- 37 Processus pyramidalis
- 38 Foramen palatinum majus
- 39 Foramina palatina minora
- 40 Canales palatini
- 41 Crista conchalis
- 42 Crista ethmoidalis
- 43 Processus orbitalis
- 44 Processus sphenoidalis
- 45 Pars horizontalis
- 46 Facies nasalis
- 47 Facies palatina
- 48 Spina nasalis posterior
- 49 Crista nasalis
- 50 *Os zygomaticum*
- 51 Facies malaris
- 52 Facies temporalis
- 53 Facies orbitalis
- 54 Processus temporalis
- 55 Processus frontosphenoidalis
- 56 (Processus marginalis)
- 57 Foramen zygomaticoorbitale
- 58 Foramen zygomaticofaciale
- 59 Foramen zygomaticotemporale
- 60 *Mandibula*
- 61 Corpus mandibulae
- 62 Basis mandibulae
- 63 Protuberantia mentalis
- 64 Tuberculum mentale
- 65 Spina mentalis
- 66 Foramen mentale
- 67 Linea obliqua
- 68 Fossa digastrica
- 69 Linea mylohyoidea
- 70 Sulcus mylohyoideus
- 71 Juga alveolaria
- 72 Ramus mandibulae
- 73 Angulus mandibulae
- 74 (Tuberositas masseterica)
- 75 (Tuberositas pterygoidea)
- 76 (Crista buccinatoria)
- 77 Incisura mandibulae
- 78 Processus condyloideus
- 79 Capitulum [proc. condyl.] mandibulae
- 80 Collum [proc. condyloidei] mandibulae
- 81 Fovea pterygoidea proc. condyloidei
- 82 Processus coronoideus

- 1 Foramen mandibulare
- 2 Lingula mandibulae
- 3 Canalis mandibulae
- 4 Fovea sublingualis
- 5 (Fovea submaxillaris)
- 6 Pars alveolaris
- 7 Limbus alveolaris
- 8 Alveoli dentales
- 9 Septa interalveolaria
- 10 *Os hyoideum*
- 11 Corpus oss. hyoidei
- 12 Cornu minus
- 13 Cornu majus
- 14 CRANIUM
- 15 Calvaria
- 16 Pericranium
- 17 Lamina externa
- 18 Diploe
- 19 Canales diploici [Brescheti]
- 20 Lamina interna
- 21 Facies [ossea]
- 22 Cranium cerebrale
- 23 Cranium viscerale
- 24 Vertex
- 25 Frons
- 26 Occiput
- 27 Basis cranii interna
- 28 Basis cranii externa
- 29 Fossa cranii anterior
- 30 Fossa cranii media
- 31 Fossa cranii posterior
- 32 Juga cerebralia
- 33 Impressiones digitatae
- 34 Sulci venosi
- 35 Sulci arteriosi
- 36 (Foveolae granulares [Pac-
- 37 (Ossa suturarum) chioni])
- 38 Planum temporale
- 39 Fossa temporalis
- 40 Arcus zygomaticus
- 41 Fossa infratemporalis
- 42 Fossa pterygopalatina
- 43 Canalis pterygopalatinus
- 44 Foramen sphenopalatinum
- 45 Apertura piriformis
- 46 Cavum nasi
- 47 Septum nasi osseum
- 48 Meatus nasi communis
- 49 Meatus nasi superior
- 50 Meatus nasi medius
- 51 Meatus nasi inferior
- 52 Meatus nasopharyngeus
- 53 Choanae
- 54 Recessus sphenothmoidalis
- 55 Foramen jugulare
- 56 Fissura sphenopetrosa
- 57 Fissura petrooccipitalis
- 58 Fissura sphenoccipitalis
- 59 Foramen lacerum
- 60 Fibrocartilago basalis
- 61 Palatum durum
- 62 (Torus palatinus)
- 63 Orbita
- 64 Aditus orbitae
- 65 Margo supraorbitalis
- 66 Margo infraorbitalis
- 67 Paries superior
- 68 Paries inferior
- 69 Paries lateralis
- 70 Paries medialis
- 71 Fissura orbitalis superior
- 72 Fissura orbitalis inferior
- 73 *Suturae cranii*
- 74 Sutura coronalis
- 75 Sutura sagittalis
- 76 Sutura lambdoidea
- 77 Sutura occipitomastoidea
- 78 Sutura sphenofrontalis
- 79 Sutura sphenoorbitalis
- 80 Sutura sphenothmoidalis
- 81 Sutura sphenosquamosa
- 82 Sutura sphenoparietalis

- 1 Sutura squamosa
- 2 (Sutura frontalis)
- 3 Sutura parietomastoidea
- 4 (Sutura squamosomastoidea)
- 5 Sutura nasofrontalis
- 6 Sutura frontoethmoidalis
- 7 Sutura frontomaxillaris
- 8 Sutura frontolacrimalis
- 9 Sutura zygomaticofrontalis
- 10 Sutura zygomaticomaxillaris
- 11 Sutura ethmoideomaxillaris
- 12 Sutura sphenozygomatica
- 13 (Sutura sphenomaxillaris)
- 14 Sutura zygomaticotemporalis
- 15 Sutura internasalis
- 16 Sutura nasomaxillaris
- 17 Sutura lacrimomaxillaris
- 18 Sutura lacrimoconchal
- 19 Sutura intermaxillaris
- 20 Sutura palatomaxillaris
- 21 Sutura palatoethmoidalis
- 22 Sutura palatina mediana
- 23 Sutura palatina transversa

24 *Synchondroses cranii*

- 25 Synchondrosis sphenooccipitalis
- 26 Synchondrosis sphenopetrosa
- 27 Synchondrosis sphenopetrosa
- 28 Synchondrosis intraoccipitalis posterior*
- 29 Synchondrosis intraoccipitalis anterior*
- 30 Synchondrosis intersphenoidalis*
- 31 Fonticulus frontalis [major]*
- 32 Fonticulus occipitalis [minor]*
- 33 Fonticulus mastoideus*
- 34 Fonticulus sphenoidalis *

35 OSSA EXTREMITATIS SUPERIORIS

- 36 Cingulum extremitatis superioris

37 *Scapula*

- 38 Facies costalis
- 39 Lineae musculares
- 40 Fossa subscapularis
- 41 Facies dorsalis
- 42 Spina scapulae
- 43 Fossa supraspinata
- 44 Fossa infraspinata
- 45 Acromion
- 46 Facies articularis acromii
- 47 Margo vertebralis
- 48 Margo axillaris
- 49 Margo superior
- 50 Angulus inferior
- 51 Angulus lateralis
- 52 Angulus medialis
- 53 Cavitas glenoidalis
- 54 Collum scapulae
- 55 Tuberositas infraglenoidalis
- 56 Tuberositas supraglenoidalis
- 57 Incisura scapulae
- 58 Processus coracoideus

59 *Clavicula*

- 60 Extremitas sternalis
- 61 Facies articularis sternalis
- 62 Tuberositas costalis
- 63 Extremitas acromialis
- 64 Facies articularis acromialis
- 65 Tuberositas coracoidea
- 66 Skeleton extremitatis superioris liberae

67 *Humerus*

- 68 Caput humeri
- 69 Collum anatomicum
- 70 Collum chirurgicum
- 71 Tuberculum majus
- 72 Tuberculum minus
- 73 Sulcus intertubercularis
- 74 Crista tuberculi majoris
- 75 Crista tuberculi minoris
- 76 Corpus humeri

- 1 Facies anterior medialis
- 2 Facies anterior lateralis
- 3 Facies posterior
- 4 Margo medialis
- 5 Margo lateralis
- 6 Tuberositas deltoidea
- 7 Suleus n. radialis
- 8 Suleus n. ulnaris
- 9 Capitulum humeri
- 10 Trochlea humeri
- 11 Epicondylus medialis
- 12 Epicondylus lateralis
- 13 Fossa olecrani
- 14 Fossa coronoidea
- 15 Fossa radialis
- 16 (Processus supracondyloideus)
- 17 *Radius*
- 18 Corpus radii
- 19 Capitulum radii
- 20 Fovea capituli radii
- 21 Collum radii
- 22 Circumferentia articularis
- 23 Tuberositas radii
- 24 Crista interossea
- 25 Facies dorsalis
- 26 Facies volaris
- 27 Facies lateralis
- 28 Margo dorsalis
- 29 Margo volaris
- 30 Processus styloideus
- 31 Incisura ulnaris
- 32 Facies articularis carpea
- 33 *Ulna*
- 34 Corpus ulnae
- 35 Olecranon
- 36 Processus coronoideus
- 37 Tuberositas ulnae
- 38 Incisura semilunaris
- 39 Incisura radialis
- 40 Crista interossea
- 41 Facies dorsalis
- 42 Facies volaris
- 43 Facies medialis
- 44 Margo dorsalis
- 45 Margo volaris
- 46 Crista m. supinatoris
- 47 Capitulum ulnae
- 48 Circumferentia articularis
- 49 Processus styloideus
- 50 *Carpus*
- 51 *Ossa carpi*
- 52 (Os centrale)
- 53 Os naviculare manus
- 54 Tuberculum oss. navicularis
- 55 Os lunatum
- 56 Os triquetrum
- 57 Os pisiforme
- 58 Os multangulum majus
- 59 Tuberculum oss. multang. majoris
- 60 Os multangulum minus
- 61 Os capitatum
- 62 Os hamatum
- 63 Hamulus oss. hamati
- 64 Eminentia carpi radialis
- 65 Eminentia carpi ulnaris
- 66 Suleus carpi
- 67 *Metacarpus*
- 68 *Ossa metacarpalia I-V*
- 69 Basis
- 70 Corpus
- 71 Capitulum
- 72 Os metacarpale III
- 73 Processus styloideus
- 74 *Phalanges digitorum manus*
- 75 Phalanx prima
- 76 Phalanx secunda
- 77 Phalanx tertia
- 78 Basis phalangis

- 1 Corpus phalangis
- 2 Trochlea phalangis
- 3 Tuberositas unguicularis
- 4 Ossa sesamoidea
- 5 Ossa extremitatis inferioris
- 6 Cingulum extremitatis inferioris

7 *Os coxae*

- 8 Foramen obturatum
- 9 Acetabulum
- 10 Fossa acetabuli
- 11 Incisura acetabuli
- 12 Facies lunata
- 13 Sulei paragenoidales

14 *Os ilium*

- 15 Corpus oss. ilium
- 16 Ala oss. ilium
- 17 Linea arcuata
- 18 Crista iliaca
 - 19 Labium externum
 - 20 Linea intermedia
 - 21 Labium internum
- 22 Spina iliaca anterior superior
- 23 Spina iliaca anterior inferior
- 24 Spina iliaca posterior superior
- 25 Spina iliaca posterior inferior
- 26 Linea glutaea anterior
- 27 Linea glutaea posterior
- 28 Linea glutaea inferior
- 29 Facies auricularis
- 30 Tuberositas iliaca
- 31 Fossa iliaca

32 *Os ischii*

- 33 Corpus oss. ischii
- 34 Ramus superior oss. ischii
- 35 Ramus inferior oss. ischii
- 36 Tuber ischiadicum
- 37 Spina ischiadica
- 38 Incisura ischiadica major
- 39 Incisura ischiadica minor

40 *Os pubis*

- 41 Corpus oss. pubis
- 42 Pecten oss. pubis
- 43 Eminentia iliopectinea
- 44 Tuberculum pubicum
- 45 Crista obturatoria
- 46 Suleus obturatorius
- 47 Tuberculum obturatorium anterius
- 48 (Tuberculum obturatorium posterius)
- 49 Ramus inferior oss. pubis
- 50 Ramus superior oss. pubis
- 51 Facies symphyseos

52 *Pelvis*

- 53 Symphysis ossium pubis
- 54 Arcus pubis
- 55 Angulus pubis
- 56 Pelvis major
- 57 Pelvis minor
- 58 Linea terminalis
 - 59 Pars sacralis
 - 60 Pars iliaca
 - 61 Pars pubica
- 62 Apertura pelvis [minoris] superior
- 63 Apertura pelvis [minoris] inferior
- 64 Axis pelvis
- 65 Conjugata
- 66 Diameter transversa
- 67 Diameter obliqua
- 68 Inclinator pelvis

- 69 Skeleton extremitatis inferioris liberae

70 *Femur*

- 71 Caput femoris
- 72 Fovea capitis femoris
- 73 Collum femoris

- 1 Corpus femoris
- 2 Trochanter major
- 3 Fossa trochanterica
- 4 Trochanter minor
- 5 (Trochanter tertius)
- 6 Linea intertrochanterica
- 7 Crista intertrochanterica
- 8 Linea aspera
 - 9 Labium laterale
 - 10 Labium mediale
- 11 Linea pectinea
- 12 Tuberositas glutea
- 13 Fossa intercondyloidea
- 14 Linea intercondyloidea
- 15 Planum popliteum
- 16 Condylus medialis
- 17 Condylus lateralis
- 18 Facies patellaris
- 19 Epicondylus lateralis
- 20 Epicondylus medialis

21 *Tibia*

- 22 Facies articularis superior
- 23 Corpus tibiae
- 24 Condylus medialis
- 25 Condylus lateralis
- 26 Fossa intercondyloidea anterior
- 27 Fossa intercondyloidea posterior
- 28 Eminentia intercondyloidea
- 29 Tuberculum intercondyloideum
 - mediale
 - laterale
- 30 Tuberculum intercondyloideum
 - laterale
- 31 Margo infraglenoidalis
- 32 Tuberositas tibiae
- 33 Facies medialis
- 34 Facies posterior
- 35 Facies lateralis
- 36 Margo medialis
- 37 Crista anterior
- 38 Crista interossea
- 39 Linea poplitea

- 40 Malleolus medialis
- 41 Incisura fibularis
- 42 Sulcus malleolaris
- 43 Facies articularis inferior
- 44 Facies articularis malleolaris

45 *Fibula*

- 46 Corpus fibulae
- 47 Crista interossea
- 48 Crista anterior
- 49 Crista lateralis
- 50 Crista medialis
- 51 Facies medialis
- 52 Facies lateralis
- 53 Facies posterior
- 54 Capitulum fibulae
- 55 Facies articularis capituli
- 56 Apex capituli fibulae
- 57 Malleolus lateralis
- 58 Facies articularis malleoli

59 *Patella*

- 60 Basis patellae
- 61 Apex patellae
- 62 Facies articularis

63 *Tarsus*

- 64 Ossa tarsi

65 *Talus*

- 66 Caput tali
- 67 Corpus tali
- 68 Collum tali
- 69 Trochlea tali
 - 70 Facies superior
 - 71 Facies malleolaris medialis
 - 72 Facies malleolaris lateralis
- 73 Sulcus tali
- 74 Processus lateralis tali
- 75 Facies articularis calcanea
 - posterior

- | | | | |
|----|--------------------------------------|----|----------------------------------|
| 1 | Facies articularis calcanea media | 24 | <i>Os cuneiforme primum</i> |
| 2 | Sulcus m. flexoris hallucis longi | 25 | <i>Os cuneiforme secundum</i> |
| 3 | Facies articularis navicularis | 26 | <i>Os cuneiforme tertium</i> |
| 4 | Facies articularis calcanea an- | 27 | <i>Os cuboideum</i> |
| 5 | Processus posterior tali [terior | 28 | Sulcus m. peronaei |
| 6 | (Os trigonum) | 29 | Tuberositas oss. cuboidei |
| | | | |
| 7 | <i>Calcaneus</i> | 30 | <i>Metatarsus</i> |
| 8 | Corpus calcanei | 31 | Ossa metatarsalis I-V |
| 9 | Tuber calcanei | 32 | Basis |
| 10 | Processus medialis tuberis calcanei | 33 | Corpus |
| 11 | Processus lateralis tuberis calcanei | 34 | Capitulum |
| 12 | Sustentaculum tali | 35 | Tuberositas oss. metatarsalis I |
| 13 | Sulcus m. flexoris hallucis longi | 36 | Tuberositas oss. metatarsalis V |
| 14 | Sulcus calcanei | 37 | <i>Phalanges digitorum pedis</i> |
| 15 | Sinus tarsi | 38 | Phalanx prima |
| 16 | Facies articularis anterior | 39 | Phalanx secunda |
| 17 | Facies articularis media | 40 | Phalanx tertia |
| 18 | Facies articularis posterior | 41 | Tuberositas unguicularis |
| 19 | Sulcus m. peronaei | 42 | Basis phalangis |
| 20 | (Processus trochlearis) | 43 | Corpus phalangis |
| 21 | Facies articularis cuboidea | 44 | Trochlea phalangis |
| 22 | <i>Os naviculare pedis</i> | 45 | Ossa sesamoidea |
| 23 | Tuberositas oss. navicularis | | |

1 SYNDESMOLOGIA

- | | | | |
|----|-------------------------|----|-------------------------------|
| 2 | Junctura ossium | 31 | Stratum fibrosum |
| 3 | Synarthrosis | 32 | Stratum synoviale |
| 4 | Sutura | 33 | Plica synovialis |
| 5 | Sutura serrata | 34 | Villi synoviales |
| 6 | Sutura squamosa | 35 | Synovia |
| 7 | Harmonia | | |
| 8 | Gomphosis | 36 | LIGAMENTA COLUMNAE VERTE- |
| 9 | Synchondrosis | | BRALIS ET CRANII |
| 10 | Symphysis | 37 | Fibrocartilagines interverte- |
| 11 | Diarthrosis | 38 | Annulus fibrosus [brales |
| 12 | Articulatio | 39 | Nucleus pulposus |
| 13 | Articulatio simplex | 40 | Ligg. flava |
| 14 | Articulatio composita | 41 | Capsulae articulares |
| 15 | Arthrodia | 42 | Ligg. intertransversaria |
| 16 | Articulatio sphaeroidea | 43 | Ligg. interspinalia |
| 17 | Enarthrosis | 44 | Lig. supraspinale |
| 18 | Ginglymus | 45 | Lig. nuchae |
| 19 | Articulatio cochlearis | 46 | Lig. longitudinale anterius |
| 20 | Articulatio ellipsoidea | 47 | Lig. longitudinale posterius |
| 21 | Articulatio trochoidea | 48 | Symphysis sacrococcygea |
| 22 | Articulatio sellaris | 49 | Lig. sacrococcygeum posterius |
| 23 | Amphiarthrosis | | superficiale |
| 24 | Syndesmosis | 50 | Lig. sacrococcygeum posterius |
| 25 | Cartilago articularis | | profundum |
| 26 | Cavum articulare | 51 | Lig. sacrococcygeum anterius |
| 27 | Discus articulare | 52 | Lig. sacrococcygeum laterale |
| 28 | Labrum glenoidale | 53 | Lig. pterygospinosum |
| 29 | Meniscus articularis | 54 | Lig. stylohyoideum |
| 30 | Capsula articularis | | |

- 1 ARTICULATIO ATLANTOOCIPITALIS
- 2 Capsulae articulares
- 3 Membrana atlantooccipitalis anterior
- 4 Membrana atlantooccipitalis posterior
- 5 ARTICULATIO ATLANTOEPIS-TROPHICA
- 6 Capsulae articulares
- 7 Ligg. alaria
- 8 Lig. apicis dentis
- 9 Lig. transversum atlantis
- 10 Lig. cruciatum atlantis
- 11 Membrana tectoria
- 12 ARTICULATIONES COSTO-VERTEBRALES
- 13 ARTICULATIONES CAPITULORUM
- 14 Capsulae articulares
- 15 Lig. capituli costae radiatum
- 16 Lig. capituli costae interarticulare
- 17 ARTICULATIONES COSTO-TRANSVERSARIAE
- 18 Capsulae articulares
- 19 Lig. tuberculi costae
- 20 Lig. colli costae
- 21 Lig. costotransversarium anterius
- 22 Lig. costotransversarium posterius
- 23 Lig. lumbocostale
- 24 Foramen costotransversarium
- 25 ARTICULATIONES STERNO-COSTALES
- 26 Capsulae articulares
- 27 Lig. sternocostale interarticulare
- 28 Ligg. sternocostalis radiata
- 29 Membrana sterni
- 30 Ligg. costoxiphoidea
- 31 Ligg. intercostalia
 - 32 Ligg. intercostalia externa
 - 33 Ligg. intercostalia interna
- 34 Articulationes interchondrales
- 35 ARTICULATIO MANDIBULARIS
- 36 Capsula articularis
- 37 Discus articularis
- 38 Lig. temporomandibulare
- 39 Lig. sphenomandibulare
- 40 Lig. stylomandibulare
- 41 LIGG. CINGULI EXTREMITATIS SUPERIORIS
- 42 Lig. coracoacromiale
- 43 Lig. transversum scapulae superius
- 44 Lig. transversum scapulae inferius
- 45 ARTICULATIO ACROMIO-CLAVICULARIS
- 46 Capsula articularis
- 47 Lig. acromioclaviculare
- 48 (Discus articularis)
- 49 Lig. coracoclaviculare
 - 50 Lig. trapezoideum
 - 51 Lig. conoideum
- 52 ARTICULATIO STERNO-CLAVICULARIS
- 53 Capsula articularis
- 54 Discus articularis
- 55 Lig. sternoclaviculare
- 56 Lig. costoclaviculare
- 57 Lig. interclaviculare
- 58 ARTICULATIO HUMERI
- 59 Capsula articularis
- 60 Labrum glenoidale
- 61 Lig. coracohumerale
- 62 ARTICULATIO CUBITI
- 63 Articulatio humeroulnaris
- 64 Articulatio humeroradialis
- 65 Articulatio radioulnaris proximalis
- 66 Capsula articularis
- 67 Lig. collaterale ulnare
- 68 Lig. collaterale radiale
- 69 Lig. annulare radii

- 1 Recessus sacciformis
- 2 Membrana interossea antibrachii
- 3 Chorda obliqua
- 4 ARTICULATIO RADIOULNARIS
DISTALIS
- 5 Capsula articularis
- 6 Discus articularis
- 7 Recessus sacciformis
- 8 ARTICULATIO MANUS
- 9 Articulatio radiocarpea
- 10 Articulatio intercarpea
- 11 Capsula articularis
- 12 Lig. radiocarpeum dorsale
- 13 Lig. radiocarpeum volare
- 14 Lig. carpi radiatum
- 15 Lig. collaterale carpi ulnare
- 16 Lig. collaterale carpi radiale
- 17 Ligg. intercarpea dorsalia
- 18 Ligg. intercarpea volaria
- 19 Ligg. intercarpea interossea
- 20 ARTICULATIO OSSIS PISIFORMIS
- 21 Capsula articularis
- 22 Lig. pisohamatum
- 23 Lig. pisometacarpeum
- 24 Canalis carpi
- 25 ARTICULATIONES CARPO-METACARPEAE
- 26 Capsulae articulares
- 27 Ligg. carpometacarpea dorsalia
- 28 Ligg. carpometacarpea volaria
- 29 ARTICULATIO CARPOMETACARPEA POLLICIS
- 30 Capsula articularis
- 31 ARTICULATIONES INTER-METACARPEAE
- 32 Capsulae articulares
- 33 Ligg. basium [oss. metacarp.] dorsalia
- 34 Ligg. basium [oss. metacarp.] volaria
- 35 Ligg. basium [oss. metacarp.] interossea
- 36 Spatia interossea metacarpi
- 37 ARTICULATIONES METACARPOPHALANGAEAE
- 38 Capsulae articulares
- 39 Ligg. collateralia
- 40 Ligg. accessoria volaria
- 41 Ligg. capitulorum [oss. metacarpalium] transversa
- 42 ARTICULATIONES DIGITORUM MANUS
- 43 Capsulae articulares
- 44 Ligg. collateralia
- 45 LIGG. CINGULI EXTREMITATIS INFERIORIS
- 46 Membrana obturatoria
- 47 Canalis obturatorius
- 48 Lig. iliolumbale
- 49 Lig. sacrotuberosum
- 50 Processus falciformis
- 51 Lig. sacrospinosum
- 52 Foramen ischiadicum majus
- 53 Foramen ischiadicum minus
- 54 ARTICULATIO SACROILIACA
- 55 Ligg. sacroiliaca anteriora
- 56 Ligg. sacroiliaca interossea
- 57 Lig. sacroiliacum posterior breve
- 58 Lig. sacroiliacum posterius longum
- 59 SYMPHYSIS OSSIUM PUBIS
- 60 Lig. pubicum superius
- 61 Lig. arcuatum pubis
- 62 Lamina fibrocartilaginea interpubica
- 63 ARTICULATIO COXAE
- 64 Capsula articularis
- 65 Labrum glenoidale
- 66 Lig. transversum acetabuli
- 67 Lig. teres femoris
- 68 Zona orbicularis
- 69 Lig. iliofemorale

1 Lig. ischiocapsulare

2 Lig. pubocapsulare

3 ARTICULATIO GENU

4 Capsula articularis

5 Meniscus lateralis

6 Meniscus medialis

7 Lig. transversum genu

8 Ligg. cruciata genu

9 Lig. cruciatum anterius

10 Lig. cruciatum posterius

11 Plica synovialis patellaris

12 Plicae alares

13 Lig. collaterale fibulare

14 Lig. collaterale tibiale

15 Lig. popliteum obliquum

16 Lig. popliteum arcuatum

17 Retinaculum lig. arcuati

18 Lig. patellae

19 Retinaculum patellae mediale

20 Retinaculum patellae laterale

21 ARTICULATIO TIBIOFIBULARIS

22 Capsula articularis

23 Ligg. capituli fibulae

24 Membrana interossea cruris

25 SYNDESMOSIS TIBIOFIBULARIS

26 Lig. malleoli lateralis anterius

27 Lig. malleoli lateralis posterius

28 ARTICULATIONES PEDIS

29 ARTICULATIO TALOCRURALIS

30 Capsula articularis

31 Lig. deltoideum

32 Lig. tibionaviculare

33 Lig. calcaneotibiale

34 Lig. talotibiale anterius

35 Lig. talotibiale posterius

36 Lig. talofibulare anterius

37 Lig. talofibulare posterius

38 Lig. calcaneofibulare

39 ARTICULATIONES INTER-TARSEAE

40 ARTICULATIO TALOCALCANEONAVICULARIS

41 ARTICULATIO TALOCALCANEA

42 Capsula articularis

43 Lig. talocalcaneum laterale

44 Lig. talocalcaneum mediale

45 Lig. talocalcaneum anterius

46 Lig. talocalcaneum posterius

47 ARTICULATIO TARSII TRANSVERSA [CHOPARTI]

48 ARTICULATIO TALONAVICULARIS

49 Capsula articularis

50 ARTICULATIO CALCANEOCUBOIDEA

51 Capsula articularis

52 ARTICULATIO CUNEO-NAVICULARIS

53 LIGG. TARSII INTEROSSEA

54 Lig. talocalcaneum interosseum

55 Lig. cuneocuboideum interosseum

56 Ligg. intercuneiformia interossea

57 LIGG. TARSII DORSALIA

58 Lig. talonaviculare [dorsale]

59 Lig. cuneocuboideum dorsale

60 Lig. cuboideonaviculare dorsale

61 Lig. bifurcatum

62 Pars calcaneonavicularis

63 Pars calcaneocuboidea

64 Lig. calcaneonaviculare dorsale

65 Ligg. naviculariuncuneiformia dorsalia

66 LIGG. TARSII PLANTARIA

67 Lig. plantare longum

68 Ligg. tarsi profunda

69 Lig. calcaneocuboideum plantare

70 Lig. calcaneonaviculare plantare

- | | |
|---|--|
| 1 Fibrocartilago navicularis | 13 Ligg. basium [oss. metatars.] interossea |
| 2 Ligg. navicularicuneiformia plantaria | 14 Ligg. basium [oss. metatars.] dorsalia |
| 3 Lig. cuboideonaviculare plantaria | 15 Ligg. basium [oss. metatars.] plantaria |
| 4 Ligg. intercuneiformia plantaria | 16 Spatia interossea metatarsi |
| 5 Lig. cuneocuboideum plantare | |
| 6 ARTICULATIONES TARSO-METATARSEAE | 17 ARTICULATIONES METATARSOPHALANGAEAE |
| 7 Capsulae articulares | 18 Capsulae articulares |
| 8 Ligg. tarsometatarsea dorsalis | 19 Ligg. collateralia |
| 9 Ligg. tarsometatarsea plantaria | 20 Ligg. accessoria plantaria |
| 10 Ligg. cuneometatarsea interossea | 21 Ligg. capitulorum [oss. metatars.] transversa |
| 11 ARTICULATIONES INTERMETATARSEAE | 22 ARTICULATIONES DIGITORUM PEDIS |
| 12 Capsulae articulares | 23 Capsulae articulares |
| | 24 Ligg. collateralia |

1 MYOLOGIA

- | | |
|-------------------------|----------------------------|
| 2 Musculus | 33 Aponeurosis |
| 3 Caput | 34 Perimysium |
| 4 Venter | 35 Fascia |
| 5 Musculus fusiformis | 36 Fascia superficialis |
| 6 Musculus unipennatus | 37 Inscriptio tendinea |
| 7 Musculus bipennatus | 38 Arcus tendineus |
| 8 Musculus sphincter | 39 Ligamentum vaginale |
| 9 Musculus orbicularis | 40 Vagina fibrosa tendinis |
| 10 Musculus articularis | 41 Vagina mucosa tendinis |
| 11 Musculus skeleti | 42 Trochlea muscularis |
| 12 Musculus cutaneus | 43 Bursa mucosa |
| 13 Tendo | |
-
- | | |
|-----------------------------------|-----------------------------|
| 14 MUSCULI DORSI | 44 M. longissimus capitis |
| 15 M. trapezius | 45 M. spinalis |
| 16 (M. transversus nuchae) | 46 M. spinalis dorsi |
| 17 M. latissimus dorsi | 47 M. spinalis cervicis |
| 18 M. rhomboideus major | 48 M. spinalis capitis |
| 19 M. rhomboideus minor | 49 M. semispinalis |
| 20 M. levator scapulae | 50 M. semispinalis dorsi |
| 21 M. serratus posterior inferior | 51 M. semispinalis cervicis |
| 22 M. serratus posterior superior | 52 M. semispinalis capitis |
| 23 M. splenius cervicis | 53 M. multifidus |
| 24 M. splenius capitis | 54 Mm. rotatores |
| 25 M. sacrospinalis | 55 Mm. rotatores longi |
| 26 M. iliocostalis | 56 Mm. rotatores breves |
| 27 M. iliocostalis lumborum | 57 Mm. interspinales |
| 28 M. iliocostalis dorsi | 58 Mm. intertransversarii |
| 29 M. iliocostalis cervicis | 59 Mm. intertransversarii |
| 30 M. longissimus | laterales |
| 31 M. longissimus dorsi | 60 Mm. intertransversarii |
| 32 M. longissimus cervicis | mediales |
| | 61 Mm. intertransversarii |
| | anteriores |
| | 62 Mm. intertransversarii |
| | posteriores |
| | 63 M. rectus capitis poste- |
| | rior major |

- 1 M. rectus capitis posterior minor
- 2 M. rectus capitis lateralis
- 3 M. obliquus capitis superior
- 4 M. obliquus capitis inferior
- 5 Fascia lumbodorsalis
- 6 Fascia nuchae
- 7 MUSCULI CAPITIS
- 8 M. epieranius
 - 9 M. frontalis
 - 10 M. occipitalis
 - 11 M. procerus
- 12 M. nasalis
 - 13 Pars transversa
 - 14 Pars alaris
- 15 M. depressor septi
- 16 M. orbicularis oculi
 - 17 Pars palpebralis
 - 18 Pars orbitalis
 - 19 Pars lacrimalis [Horneri]
- 20 M. auricularis anterior
- 21 M. auricularis superior
- 22 M. auricularis posterior
- 23 M. orbicularis oris
- 24 M. triangularis
- 25 (M. transversus menti)
- 26 M. risorius
- 27 M. zygomaticus
- 28 M. quadratus labii superioris
 - 29 Caput zygomaticum
 - 30 Caput infraorbitale
 - 31 Caput angulare
- 32 M. quadratus labii inferioris
- 33 M. caninus
- 34 M. buccinator
- 35 Mm. incisivi labii superioris
- 36 Mm. incisivi labii inferioris
- 37 M. mentalis
- 38 M. masseter
- 39 M. temporalis
- 40 M. pterygoideus externus
- 41 M. pterygoideus internus
- 42 Galea aponeurotica
- 43 Fascia buccopharyngea
- 44 Fascia parotideomasseterica
- 45 Fascia temporalis
- 46 MUSCULI OSS. HYOIDEI
- 47 M. digastricus
 - 48 Venter anterior
 - 49 Venter posterior
- 50 M. stylohyoideus
- 51 M. mylohyoideus
- 52 M. geniohyoideus
- 53 MUSCULI COLLI
- 54 Platysma
- 55 M. sternocleidomastoideus
- 56 M. sternohyoideus
- 57 M. omohyoideus
- 58 Venter superior
- 59 Venter inferior
- 60 M. sternothyroideus
- 61 M. thyreohyoideus
- 62 (M. levator glandulae thyreoideae)
- 63 M. longus colli
- 64 M. longus capitis
- 65 M. rectus capitis anterior
- 66 M. scalenus anterior
- 67 M. scalenus medius
- 68 M. scalenus posterior
- 69 (M. scalenus minimus)
- 70 Fascia colli
- 71 Fascia praevertebralis
- 72 MUSCULI THORACIS
- 73 (M. sternalis)
- 74 M. pectoralis major
 - 75 Pars claviculæ
 - 76 Pars sternocostalis
 - 77 Pars abdominalis
- 78 M. pectoralis minor
- 79 M. subclavius

- 1 *M. serratus anterior*
- 2 *Mm. levatores costarum*
 - 3 *Mm. levatores costarum longi*
 - 4 *Mm. levatores costarum breves*
- 5 *Mm. intercostales externi*
- 6 *Mm. intercostales interni*
- 7 *Mm. subcostales*
- 8 *M. transversus thoracis*
- 9 *Diaphragma*
 - 10 *Pars lumbalis*
 - 11 *Crus mediale*
 - 12 *Crus intermedium*
 - 13 *Crus laterale*
 - 14 *Pars costalis*
 - 15 *Pars sternalis*
- 16 *Hiatus aorticus*
- 17 *Hiatus oesophageus*
- 18 *Centrum tendineum*
- 19 *Foramen venae cavae*
- 20 *Arcus lumbocostalis medialis* [*Halleri*]
- 21 *Arcus lumbocostalis lateralis* [*Halleri*]
- 22 *Fascia pectoralis*
- 23 *Fascia coracoclavicularis*
- 24 **MUSCULI ABDOMINIS**
- 25 *M. rectus abdominis*
- 26 *Falx* [*aponeurotica*] *inguinalis*
- 27 *M. pyramidalis*
- 28 *M. obliquus externus abdominis*
- 29 *M. obliquus internus abdominis*
- 30 *M. cremaster*
- 31 *M. transversus abdominis*
- 32 *M. quadratus lumborum*
- 33 *Annulus umbilicalis**
- 34 *Linea alba*
 - 35 *Adminiculum lineae albae*
- 36 *Inscriptiones tendineae*
- 37 *Lig. suspensorium penis s. clitoridis*
- 38 *Lig. fundiforme penis*
- 39 *Vagina m. recti abdominis*
- 40 *Linea semicircularis* [*Douglasi*]
- 41 *Lig. inguinale* [*Pouparti*]
- 42 *Lig. lacunare* [*Gimbernati*]
- 43 *Lig. inguinale reflexum* [*Collesi*]
- 44 *Annulus inguinalis subcutaneus*
- 45 *Crus superius*
- 46 *Crus inferius*
- 47 *Fibrae intercrurales*
- 48 *Trigonum lumbale* [*Petiti*]
- 49 *Linea semilunaris* [*Spigeli*]
- 50 *Fascia transversalis*
- 51 *Canalis inguinalis*
- 52 *Annulus inguinalis abdominalis*
- 53 *Lig. interfoveolare* [*Hesselbachi*]
- 54 *Plica epigastrica*
- 55 *Fovea inguinalis lateralis*
- 56 *Fovea inguinalis medialis*
- 57 *Fovea suprapubescentis*
- 58 **MUSCULI COCCYGEI**
- 59 *M. coccygeus*
- 60 *M. sacrococcygeus anterior*
- 61 *M. sacrococcygeus posterior*
- 62 **MUSCULI EXTREMITATIS SUPERIORIS**
- 63 *M. deltoideus*
- 64 *M. supraspinatus*
- 65 *M. infraspinatus*
- 66 *M. teres minor*
- 67 *M. teres major*
- 68 *M. subscapularis*
- 69 *M. biceps brachii*
- 70 *Caput longum*
- 71 *Vagina mucosa intertubercularis*
- 72 *Caput breve*
- 73 *Lacertus fibrosus*
- 74 *M. coracobrachialis*
- 75 *M. brachialis*
- 76 *M. triceps brachii*
- 77 *Caput longum*
- 78 *Caput laterale*
- 79 *Caput mediale*

- | | |
|---------------------------------------|------------------------------------|
| 1 M. anconaeus | 42 Fascia supraspinata |
| 2 (M. epitrochleoanconaeus) | 43 Fascia infraspinata |
| 3 M. pronator teres | 44 Fascia brachii |
| 4 Caput humerale | 45 Septum intermusculare |
| 5 Caput ulnare | [humerali] mediale |
| 6 M. flexor carpi radialis | 46 Septum intermusculare |
| 7 M. palmaris longus | [humerali] laterale |
| 8 M. flexor carpi ulnaris | 47 Sulcus bicipitalis medialis |
| 9 Caput humerale | 48 Sulcus bicipitalis lateralis |
| 10 Caput ulnare | 49 Fascia antibrachii |
| 11 M. flexor digitorum sublimis | 50 Fascia dorsalis manus |
| 12 Caput humerale | 51 Lig. carpi dorsale |
| 13 Caput radiale | 52 Aponeurosis palmaris |
| 14 M. flexor digitorum profundus | 53 Fasciculi transversi |
| 15 M. flexor pollicis longus | 54 Lig. carpi transversum |
| 16 M. pronator quadratus | 55 Lig. carpi volare |
| 17 M. branchiaradialis | 56 Chiasma tendinum |
| 18 M. extensor carpi radialis longus | 57 Vinculum tendinum |
| 19 M. extensor carpi radialis brevis | 58 Vaginae mucosae |
| 20 M. extensor digitorum communis | 59 Ligg. vaginalia digitorum manus |
| 21 Juncturae tendinum | 60 Ligg. annularia digitorum manus |
| 22 M. extensor digiti quinti proprius | 61 Ligg. cruciata digitorum manus |
| 23 M. extensor carpi ulnaris | |
| 24 M. supinator | 62 MUSCULI EXTREMITATIS IN- |
| 25 M. abductor pollicis longus | 63 M. iliopsoas |
| 26 M. extensor pollicis brevis | 64 M. iliacus |
| 27 M. extensor pollicis longus | 65 M. psoas major |
| 28 M. extensor indicis proprius | 66 M. psoas minor |
| 29 M. palmaris brevis | 67 M. glutaeus maximus |
| 30 M. abductor pollicis brevis | 68 M. glutaeus medius |
| 31 M. flexor pollicis brevis | 69 M. glutaeus minimus |
| 32 M. opponens pollicis | 70 M. tensor fasciae latae |
| 33 M. adductor pollicis | 71 M. piriformis |
| 34 M. abductor digiti quinti | 72 M. obturator internus |
| 35 M. flexor digiti quinti brevis | 73 M. gemellus superior |
| 36 M. opponens digiti quinti | 74 M. gemellus inferior |
| 37 Mm. lumbricales | 75 M. quadratus femoris |
| 38 Mm. interossei dorsales | 76 M. sartorius |
| 39 Mm. interossei volares | 77 M. quadriceps femoris |
| 40 Fascia axillaris | 78 M. rectus femoris |
| 41 Fascia subscapularis | 79 M. vastus lateralis |

- 1 *M. vastus intermedius*
- 2 *M. vastus medialis*
- 3 *M. articularis genus*
- 4 *M. pectineus*
- 5 *M. adductor longus*
- 6 *M. gracilis*
- 7 *M. adductor brevis*
- 8 *M. adductor magnus*
- 9 *M. adductor minimus*
- 10 *M. obturator externus*
- 11 *M. biceps femoris*
 - 12 *Caput longum*
 - 13 *Caput breve*
- 14 *M. semitendinosus*
- 15 *M. semimembranosus*
- 16 *M. tibialis anterior*
- 17 *M. extensor digitorum longus*
- 18 *M. peronaeus tertius*
- 19 *M. extensor hallucis longus*
- 20 *M. peronaeus longus*
- 21 *M. peronaeus brevis*
- 22 *M. triceps surae*
 - 23 *M. gastrocnemius*
 - 24 *Caput laterale*
 - 25 *Caput mediale*
 - 26 *M. soleus*
- 27 *Arcus tendineus m. solei*
- 28 *Tendo calcaneus [Achillis]*
- 29 *M. plantaris*
- 30 *M. popliteus*
- 31 *M. tibialis posterior*
- 32 *M. flexor digitorum longus*
- 33 *M. flexor hallucis longus*
- 34 *M. extensor hallucis brevis*
- 35 *M. extensor digitorum brevis*
- 36 *M. abductor hallucis*
- 37 *M. flexor hallucis brevis*
- 38 *M. adductor hallucis*
 - 39 *Caput obliquum*
 - 40 *Caput transversum*
- 41 *M. abductor digiti quinti*
- 42 *M. flexor digiti quinti brevis*
- 43 *M. opponens digiti quinti*
- 44 *M. flexor digitorum brevis*
- 45 *M. quadratus plantae*
- 46 *Mm. lumbricales*
- 47 *Mm. interossei dorsales*
- 48 *Mm. interossei plantares*
- 49 *Fascia lata*
- 50 *Tractus iliotibialis [Maissiati]*
- 51 *Septum intermusculare [femoris] laterale*
- 52 *Septum intermusculare [femoris] mediale*
- 53 *Canalis adductorius [Hunteri]*
- 54 *Hiatus tendineus [adductorius]*
- 55 *Fascia iliaca*
- 56 *Fascia iliopectinea*
- 57 *Lacuna musculorum*
- 58 *Lacuna vasorum*
- 59 *Trigonum femorale [Fossa scarpae major]*
- 60 *Fossa iliopectinea*
- 61 *Fascia pectinea*
- 62 *Canalis femoralis*
- 63 *Annulus femoralis*
- 64 *Septum femorale [Cloqueti]*
- 65 *Fossa ovalis*
 - 66 *Margo falciformis*
 - 67 *Cornu superius*
 - 68 *Cornu inferius*
- 69 *Fascia cribrosa*
- 70 *Fascia cruris*
- 71 *Septum intermusculare anterius [fibulare]*
- 72 *Septum intermusculare posterius [fibulare]*
- 73 *Lig. transversum cruris*
- 74 *Lig. laciniatum*
- 75 *Lig. cruciatum cruris*
- 76 *Retinaculum mm. peronaeorum Superius*
- 77 *Retinaculum mm. peronaeorum inferius*

- | | |
|---|-------------------|
| 1 Fascia dorsalis pedis | 4 Vaginae mucosae |
| 2 Aponeurosis plantaris | 5 Ligg. annularia |
| 3 Fasciculi transversi
aponeurosis plantaris | 6 Ligg. vaginalia |
| | 7 Ligg. cruciata |

8 BURSAE ET VAGINAE MUCOSAE

- | | |
|-------------------------------|-----------------------------|
| 9 Bursa mucosa subcutanea | 12 Bursa mucosa subtendinea |
| 10 Bursa mucosa submuscularis | 13 Vagina mucosa tendinis |
| 11 Bursa mucosa subfacialis | |
-
- | | |
|---|---|
| 14 B. musculi trochlearis | 39 Vagina tendinis m. extensoris
pollicis longi |
| 15 B. m. tensoris veli palatini | 40 Vagina tendinum mm. ex-
tensoris digitorum com-
munis et extensoris in-
dicis |
| 16 B. subcutanea praementalis | 41 Vagina tendinis m. extensoris
digiti minimi |
| 17 B. subcutanea prominentiae
laryngeae | 42 Vagina tendinis m. extensori
carpi ulnaris |
| 18 B. m. sternohyoidei | 43 B. m. extensoris carpi radialis
brevis |
| 19 B. m. thyreohyoidei | 44 Bursae subcutaneae metacar-
pophalangeae dorsales |
| 20 B. subcutanea sacralis | 45 Bursae subcutaneae digitorum
dorsales |
| 21 B. coecygea | 46 B. m. flexoris carpi ulnaris |
| 22 B. subcutanea aeromialis | 47 B. m. flexoris carpi radialis |
| 23 B. subacromialis | 48 Vagina tendinum mm. flexorum
communium |
| 24 B. subdeltoidea | 49 Vag. tendinis m. flexoris pollicis
longi |
| 25 B. m. coracobrachialis | 50 Bursae intermetacarpopha-
langeae |
| 26 B. m. infraspinati | 51 Vaginae tendinum digitales |
| 27 B. m. subscapularis | 52 B. trochanterica subcutanea |
| 28 B. m. teretis majoris | 53 B. trochanterica m. glutaei
maximi |
| 29 B. m. latissimi dorsi | 54 B. troch. m. glutaei medii
anterior |
| 30 B. subcutanea olecrani | |
| 31 B. intratendinea olecrani | |
| 32 B. subtendinea olecrani | |
| 33 B. subcutanea epicondyli
[humeri] lateralis | |
| 34 B. subcutanea epicondyli
[humeri] medialis | |
| 35 B. bicipitoradialis | |
| 36 B. cubitalis interossea | |
| 37 Vagina tendinum mm. abduc-
toris longi et extensoris
brevis pollicis | |
| 38 Vagina tendinum mm. exten-
sorium carpi radiale | |

- 1 B. troch. m. glutaei medii posterior
- 2 B. troch. m. glutaei minimi
- 3 B. m. piriformis
- 4 B. m. obturatoris interni
- 5 Bursae glutaefemorales
- 6 B. ischiadica m. glutaei maximi
- 7 B. m. recti femoris
- 8 B. iliopectinea
- 9 B. iliaca subtendinea
- 10 B. m. pectinei
- 11 B. m. bicipitis femoris superior
- 12 B. praepatellaris subcutanea
- 13 B. praepatellaris subfascialis
- 14 B. praepatellaris subtendinea
- 15 B. suprapatellaris
- 16 B. infrapatellaris subcutanea
- 17 B. infrapatellaris profunda
- 18 B. subcutanea tuberositatis tibiae
- 19 B. m. sartorii propria
- 20 B. anserina
- 21 B. m. bicipitis femoris inferior
- 22 B. m. poplitei
- 23 B. bicipitogastrocnemialis
- 24 B. m. gastrocnemii lateralis
- 25 B. m. gastrocnemii medialis
- 26 B. m. semimembranosi
- 27 B. subcutanea malleoli lateralis
- 28 B. subcutanea malleoli medialis
- 29 Vag. tendinis m. tibialis anterioris
- 30 Vag. tendinis m. extensoris hallucis longi
- 31 Vaginae tendinum m. extensoris digitorum pedis longi
- 32 Vaginae tendinum m. flexoris digitorum pedis longi
- 33 Vag. tendinis m. tibialis posterioris
- 34 Vag. tendinis m. flexoris hallucis longi
- 35 Vag. tendinum mm. peronaeorum communis
- 36 Bursa sinus tarsi
- 37 B. subtendinea m. tibialis anterioris
- 38 B. subtendinea m. tibialis posterioris
- 39 B. subcutanea calcanea
- 40 B. tendinis calcanei [Achillis]
- 41 Vag. tendinis m. peronei longi plantaris
- 42 Bursae intermetatarsophalangeae
- 43 Bursae mm. lumbricalium pedis
- 44 Vaginae tendinum digitales pedis

1 SPLANCHNOLOGIA

- | | |
|-----------------------------|----------------------------|
| 2 Tunica albuginea | 15 Ligamentum serosum |
| 3 Tunica fibrosa | 16 Serum |
| 4 Tunica adventitia | 17 Epithelium |
| 5 Tunica mucosa | 18 Endothelium |
| 6 Lamina propria mucosae | 19 Organon parenchymatosum |
| 7 Lamina muscularis mucosae | 20 Parenchyma |
| 8 Tela submucosa | 21 Stroma |
| 9 Plica mucosa | 22 Glandula |
| 10 Mucus | 23 Lobus |
| 11 Tunica muscularis | 24 Lobulus |
| 12 Tunica serosa | 25 Glandula mucosa |
| 13 Tela subserosa | 26 Musculus viscerum |
| 14 Plica serosa | |

27 *Apparatus digestorius*

- | | |
|---------------------------|---------------------------------|
| 28 CAVUM ORIS | 40 Palatum durum |
| 29 Bucca | 41 Palatum molle |
| 30 Corpus adiposum buccae | 42 Raphe palati |
| 31 Vestibulum oris | |
| 32 Cavum oris proprium | 43 <i>Tunica mucosa oris</i> |
| 33 Rima oris | 44 Frenulum labii superioris |
| 34 Labia oris | 45 Frenulum labii inferioris |
| 35 Labium superius | 46 Gingiva |
| 36 Labium inferius | 47 Caruncula sublingualis |
| 37 Commissura labiorum | 48 Plica sublingualis |
| 38 Angulus oris | 49 Plicae palatinae transversae |
| 39 Palatum | 50 Papilla incisiva |

- 1 *Glandulae oris*
- 2 Gl. labiales
- 3 Gl. buccales
- 4 Gl. molares
- 5 Gl. palatinae
- 6 Gl. linguales
- 7 Gl. lingualis anterior [Blandini
- 8 Gl. sublingualis Nuhni]
- 9 Ductus sublingualis major
- 10 Ductus sublinguales minores
- 11 Gl. submaxillaris
- 12 Ductus submaxillaris [Whartoni]
- 13 Gl. parotis
- 14 Processus retromandibularis
- 15 Gl. parotis accessori
- 16 Ductus parotideus [Stenonis]
- 17 Saliva
- 18 *Dentes*
- 19 Corona dentis
- 20 Tubercula [coronae] dentis
- 21 Collum dentis
- 22 Radix [Radices] dentis
- 23 Apex radiceis dentis
- 24 Facies masticatoria
- 25 Facies labialis [buccalis]
- 26 Facies lingualis
- 27 Facies contactus
- 28 Facies medialis } dentium incisi-
- 29 Facies lateralis } vorum et cani-
- 30 Facies anterior } norum
- 31 Facies posterior } dentium prae-
- 32 Cavum dentis } molarium et
- 33 Pulpa dentis } molarium
- 34 Papilla dentis*
- 35 Canalis radiceis dentis
- 36 Foramen apiceis dentis
- 37 Substantia eburnea
- 38 Substantia adamantina
- 39 Substantia ossea
- 40 Canaliculi dentales
- 41 Spatia interglobularia
- 42 Prismata adamantina
- 43 Cuticula dentis
- 44 Periosteum alveolare
- 45 Arcus dentalis superior
- 46 Arcus dentalis inferior
- 47 Dentes incisivi
- 48 Dentes canini
- 49 Dentes praemolares
- 50 Dentes molares
- 51 Dens serotinus
- 52 Dentes permanentes
- 53 Dentes decidui
- 54 *Lingua*
- 55 Dorsum linguae
- 56 Radix linguae
- 57 Corpus linguae
- 58 Facies inferior [linguae]
- 59 Plica fimbriata
- 60 Margo lateralis [linguae]
- 61 Apex linguae
- 62 Tunica mucosa linguae
- 63 Frenulum linguae
- 64 Papillae linguales
- 65 Papillae filiformes
- 66 Papillae conicae
- 67 Papillae fungiformes
- 68 Papillae lenticulares
- 69 Papillae vallatae
- 70 Papillae foliatae
- 71 Sulcus medianus linguae
- 72 Sulcus terminalis
- 73 Foramen caecum linguae [Mor-
- 74 (Ductus lingualis) gagnii]
- 75 Ductus thyreoglossus*
- 76 Tonsilla lingualis
- 77 Folliculi linguales
- 78 Septum linguae

- 1 Musculi linguae
 - 2 M. genioglossus
 - 3 M. hyoglossus
 - 4 M. chondroglossus
 - 5 M. styloglossus
 - 6 M. longitudinalis superior
 - 7 M. longitudinalis inferior
 - 8 M. transversus linguae
 - 9 M. verticalis linguae
- 10 *Fauces*
 - 11 Isthmus faucium
 - 12 Velum palatinum
 - 13 Uvula [palatina]
 - 14 Arcus palatini
 - 15 Arcus glossopalatinus
 - 16 Arcus pharyngopalatinus
 - 17 Plica salpingopalatina
 - 18 Tonsilla palatina
 - 19 Fossulae tonsillares
 - 20 Sinus tonsillaris
 - 21 Plica triangularis
 - 22 Fossa supratonsillaris
- 23 *Musculi palati et faucium*
 - 24 M. levator veli palatini
 - 25 M. tensor veli palatini
 - 26 M. uvulae
 - 27 M. glossopalatinus
 - 28 M. pharyngopalatinus
- 29 PHARYNX
 - 30 Cavum pharyngis
 - 31 Fornix pharyngis
 - 32 Pars nasalis
 - 33 Pars oralis
 - 34 Pars laryngea
 - 35 Ostium pharyngeum tubae
 - 36 Labium anterius
 - 37 Labium posterius
 - 38 Torus tubarius
 - 39 Plica salpingopharyngea
 - 40 Recessus pharyngeus [Rosenmuelleri]
 - 41 (Bursa pharyngea)
 - 42 Recessus piriformis
 - 43 M. stylopharyngeus
 - 44 Fascia pharyngobasilaris
 - 45 Tunica mucosa
 - 46 Gl. pharyngeae
 - 47 Tonsilla pharyngea
 - 48 Fossulae tonsillares
 - 49 Tela submucosa
 - 50 Tunica muscularis pharyngis
 - 51 Raphe pharyngis
 - 52 Raphe pterygomandibularis
 - 53 M. constrictor pharyngis superior
 - 54 M. pterygopharyngeus
 - 55 M. buccopharyngeus
 - 56 M. mylopharyngeus
 - 57 M. glossopharyngeus
 - 58 M. salpingopharyngeus
 - 59 M. constrictor pharyngis medius
 - 60 M. chondropharyngeus
 - 61 M. ceratopharyngeus
 - 62 M. constrictor pharyngis inferior
 - 63 M. thyreopharyngeus
 - 64 M. ericopharyngeus
 - 65 TUBUS DIGESTORIUS
 - 66 *Oesophagus*
 - 67 Pars cervicalis
 - 68 Pars thoracalis
 - 69 Pars abdominalis
 - 70 Tunica adventitia
 - 71 Tunica muscularis
 - 72 M. bronchooesophageus
 - 73 M. pleurooesophageus
 - 74 Tela submucosa
 - 75 Tunica mucosa
 - 76 Lam. muscularis mucosae
 - 77 Gl. oesophageae
 - 78 *Ventriculus* [Gaster]
 - 79 Paries anterior
 - 80 Paries posterior

- 1 Curvatura ventriculi major
- 2 Curvatura ventriculi minor
- 3 Cardia
- 4 Fundus ventriculi
- 5 Corpus ventriculi
- 6 Pylorus
- 7 Pars cardiaca
- 8 Pars pylorica
- 9 (Antrum cardiacum)
- 10 Antrum pyloricum
- 11 Tunica serosa
- 12 Tunica muscularis
- 13 Stratum longitudinale
- 14 Ligg. pylori
- 15 Stratum circulare
- 16 M. sphincter pylori
- 17 Fibrae obliquae
- 18 Valvula pylori
- 19 Tela submucosa
- 20 Tunica mucosa
- 21 Lam. muscularis mucosae
- 22 Areae gastricae
- 23 Plicae villosae
- 24 Foveolae gastricae
- 25 Glandulae gastricae [propriae]
- 26 Glandulae pyloricae
- 27 Noduli lymphatici gastrici
- 28 Succus gastricus
- 29 *Intestinum tenue*
- 30 Tunica serosa
- 31 Tunica muscularis
- 32 Stratum longitudinale
- 33 Stratum circulare
- 34 Tela submucosa
- 35 Tunica mucosa
- 36 Lam. muscularis mucosae
- 37 Plicae circulares [Kerkringi]
- 38 Villi intestinales
- 39 Gl. intestinales [Lieberkuehni]
- 40 Noduli lymphatici solitarii
- 41 Noduli lymphatici aggregati [Peyer]
- 42 Chymus
- 43 Chylus
- 44 Succus entericus
- 45 Duodenum
- 46 Pars superior
- 47 Pars descendens
- 48 Pars inferior
- 49 Pars horizontalis [inferior]
- 50 Pars ascendens
- 51 Flexura duodeni superior
- 52 Flexura duodeni inferior
- 53 Flexura duodenojejunalis
- 54 M. suspensorius duodeni
- 55 Plica longitudinalis duodeni
- 56 Papilla duodeni [Santorini]
- 57 Gl. duodenales [Brunner]
- 58 *Intestinum tenue mesenteriale*
- 59 Intestinum jejunum
- 60 Intestinum ileum
- 61 *Intestinum crassum*
- 62 *Intestinum caecum*
- 63 Valvula coli
- 64 Labium superius
- 65 Labium inferius
- 66 Frenula valvulae coli
- 67 *Processus vermiformis*
- 68 (Valvula processus vermiformis)
- 69 Noduli aggregati processus vermiformis
- 70 Colon
- 71 Colon ascendens
- 72 Flexura coli dextra
- 73 Colon transversum
- 74 Flexura coli sinistra
- 75 Colon descendens
- 76 Colon sigmoideum
- 77 Plicae semilunares coli
- 78 Haustra coli
- 79 Tunica serosa
- 80 Appendices epiploicae
- 81 Tunica muscularis
- 82 Taeniae coli

- 1 Taenia mesocolica
- 2 Taenia omentalis
- 3 Taenia libera
- 4 Tela submucosa
- 5 Tunica mucosa
 - 6 Lam. muscularis mucosae
- 7 Gl. intestinales [Lieberkuehni]
- 8 Noduli lymphatici solitarii
- 9 *Intestinum rectum*
 - 10 Flexura sacralis
 - 11 Flexura perinealis
 - 12 Ampulla recti
 - 13 Tunica muscularis
 - 14 M. sphincter ani internus
 - 15 M. rectococcygeus
 - 16 Tela submucosa
 - 17 Tunica mucosa
 - 18 Lam. m. mucosae
 - 19 Gl. intestinales [Lieberkuehni]
 - 20 Noduli lymphatici
 - 21 Plicae transversales recti
 - 22 Pars analis recti
 - 23 Columnae rectales [Morgagnii]
 - 24 Sinus rectales
 - 25 Annulus haemorrhoidalis
- 26 PANCREAS
 - 27 Caput pancreatis
 - 28 Processus uncinatus [Pancreas Winslowi]
 - 29 Incisura pancreatis
 - 30 Corpus pancreatis
 - 31 Facies anterior
 - 32 Facies posterior
 - 33 Facies inferior
 - 34 Margo superior
 - 35 Margo anterior
 - 36 Margo posterior
 - 37 Tuber omentale
 - 38 Cauda pancreatis
 - 39 Ductus pancreaticus [Wirsungi]
 - 40 Ductus pancreaticus accessorius [Santorini]
 - 41 (Pancreas accessorium)
 - 42 Succus pancreaticus
- 43 HEPAR
 - 44 Facies superior
 - 45 Facies posterior
 - 46 Facies inferior
 - 47 Margo anterior
 - 48 Incisura umbilicalis
 - 49 Fossae sagittales dextrae
 - 50 Fossa vesicae felleae
 - 51 Fossa venae cavae
 - 52 Fossa sagittalis sinistra
 - 53 Fossa venae umbilicalis
 - 54 Fossa ductus venosi
 - 55 Tunica serosa
 - 56 Lig. teres hepatis
 - 57 Lig. venosum [Arantii]
 - 58 Porta hepatis
 - 59 Lobus hepatis dexter
 - 60 Lobus quadratus
 - 61 Lobus caudatus [Spigelii]
 - 62 Processus papillaris
 - 63 Processus caudatus
 - 64 Lobus hepatis sinister
 - 65 (Appendix fibrosa hepatis)
 - 66 Impressio cardiaca
 - 67 Tuber omentale
 - 68 Impressio oesophagea
 - 69 Impressio gastrica
 - 70 Impressio duodenalis
 - 71 Impressio colica
 - 72 Impressio renalis
 - 73 Impressio suprarenalis
 - 74 Lobuli hepatis
 - 75 Capsula fibrosa [Glissoni]
 - 76 Rami arteriosi interlobulares
 - 77 Venae interlobulares
 - 78 Venae centrales

- | | |
|--------------------------------------|--------------------------------------|
| 1 Ductus biliferi | 18 LIEN |
| 2 Ductus interlobulares | 19 Facies diaphragmatica |
| 3 Ductus hepaticus | 20 Facies renalis |
| 4 Vasa aberrantia hepatis | 21 Facies gastrica |
| 5 Fel [Bilis] | 22 Extremitas superior |
| 6 Vesica fellea | 23 Extremitas inferior |
| 7 Fundus vesicae felleae | 24 Margo posterior |
| 8 Corpus vesicae felleae | 25 Margo anterior |
| 9 Collum vesicae felleae | 26 Hilus lienis |
| 10 Ductus cysticus | 27 Tunica serosa |
| 11 Tunica serosa vesicae felleae | 28 Tunica albuginea |
| 12 Tunica muscularis vesicae felleae | 29 Trabeculae lienis |
| 13 Tunica mucosa vesicae felleae | 30 Palpa lienis |
| 14 Plicae tun. mucosae v. felleae | 31 Rami lienales [arteriae lienalis] |
| 15 Valvula spiralis [Heisteri] | 32 Penicilli |
| 16 Ductus choledochus | 33 Noduli lymphatici lienales [Mal- |
| 17 Gl. mucosae biliosae | 34 (Lien accessorius) pighii] |

35 Apparatus respiratorius

- | | |
|-------------------------------|--------------------------------|
| 36 CAVUM NASI | 56 Atrium meatus medii |
| 37 Nares | 57 Meatus nasi inferior |
| 38 Choanae | 58 Meatus nasi communis |
| 39 Septum nasi | 59 Meatus nasopharyngeus |
| 40 Septum cartilagineum | 60 Regio respiratoria |
| 41 Septum membranaceum | 61 Regio olfactoria |
| 42 Vestibulum nasi | 62 Gl. olfactoriae |
| 43 Limen nasi | 63 Sinus paranasales |
| 44 Sulcus olfactorius | 64 Sinus maxillaris [Highmori] |
| 45 (Concha nasalis suprema | 65 Sinus sphenoidalis |
| [Santorini]) | 66 Sinus frontalis |
| 46 Concha nasalis superior | 67 Cellulae ethmoidales |
| 47 Concha nasalis media | 68 Bulla ethmoidalis |
| 48 Concha nasalis inferior | 69 Infundibulum ethmoidale |
| 49 Membrana mucosa nasi | 70 Hiatus semilunaris |
| 50 Plexus cavernosi concharum | 71 Gl. nasales |
| 51 Agger nasi | 72 NASUS EXTERNUS |
| 52 Recessus sphenoethmoidalis | 73 Basis nasi |
| 53 Meatus nasi | 74 Radix nasi |
| 54 Meatus nasi superior | |
| 55 Meatus nasi medius | |

- 1 Dorsum nasi
- 2 Margo nasi
- 3 Apex nasi
- 4 Ala nasi
- 5 Septum mobile nasi
- 6 Cartilaginee nasi
- 7 Cartilago septi nasi
 - 8 Processus sphenoidalis septi cartilaginei
- 9 Cartilago nasi lateralis
- 10 Cartilago alaris major
 - 11 Crus mediale
 - 12 Crus laterale
- 13 Cartilaginee alares minores
- 14 Cartilaginee sesamoideae nasi
- 15 Organon vomeronasale [Jacobsoni]
- 16 Cartilago vomeronasalis [Jacobsoni]
- 17 (Ductus incisivus)
- 18 LARYNX
- 19 Prominentia laryngea
- 20 Cartilaginee laryngis
- 21 Cartilago thyreoidea
 - 22 Lamina [dextra et sinistra]
 - 23 Incisura thyreoidea superior
 - 24 Incisura thyreoidea inferior
 - 25 Tuberculum thyroideum superius
 - 26 Tuberculum thyroideum inferius
 - 27 (Linea obliqua)
 - 28 Cornu superius
 - 29 Cornu inferius
 - 30 (Foramen thyroideum)
- 31 Lig. hyothyreoideum laterale
- 32 Cartilago triticea
- 33 Lig. hyothyreoideum medium
- 34 Membrana hyothyreoidea
- 35 Cartilago cricoidea
 - 36 Arcus [cartilaginei cricoideae]
 - 37 Lamina cartilaginei [cricoidae]
 - 38 Facies articularis arytaenoidea
 - 39 Facies articularis thyreoidea
- 40 Articulatio cricothyreoidea
- 41 Capsula articularis cricothyreoidea
- 42 Ligg. ceratocricoidae lateralia
- 43 Lig. ceratocricoidae anterius
- 44 Ligg. ceratocricoidae posteriora
- 45 Lig. cricothyroideum [medium]
- 46 Lig. cricotracheale
- 47 Cartilago arytaenoidea
 - 48 Facies articularis
 - 49 Basis [cartilaginei arytaenoideae]
 - 50 Crista arcuata
 - 51 Colliculus
 - 52 Fovea oblonga
 - 53 Fovea triangularis
 - 54 Apex [cartilaginei arytaenoideae]
 - 55 Processus vocalis
 - 56 Processus muscularis
- 57 Cartilago corniculata [Santorini]
- 58 Synchondrosis arycorniculata
- 59 Articulatio cricoarytaenoidea
- 60 Lig. cricopharyngeum
- 61 Lig. corniculopharyngeum
- 62 Lig. ventriculare
- 63 Lig. vocale
 - 64 (Cartilago sesamoidea)
- 65 Capsula articularis cricoarytaenoidea
- 66 Lig. cricoarytaenoideum posterius
- 67 Epiglottis
 - 68 Petiolus epiglottidis
 - 69 Tuberculum epiglotticum
 - 70 Cartilago epiglottica
- 71 Lig. thyreoepiglotticum
- 72 Lig. hyoepiglotticum
- 73 Cartilago cuneiformis [Wrisbergi]
- 74 Tuberculum cuneiformis [Wrisbergi]
- 75 Tuberculum corniculatum [Santorini]
- 76 Musculi laryngis
- 77 M. aryepiglotticus
- 78 M. cricothyroideus
- 79 Pars recta

- 1 Pars obliqua
- 2 M. cricoarytaenoideus posterior
- 3 (M. ceratocricoideus)
- 4 M. cricoarytaenoideus lateralis
- 5 M. ventricularis
- 6 M. vocalis
- 7 M. thyreoepiglotticus
- 8 M. thyreoarytaenoideus [externus]
- 9 M. arytaenoideus obliquus
- 10 M. arytaenoideus transversus
- 11 *Cavum laryngis*
- 12 Vallecula epiglottica
- 13 Aditus laryngis
- 14 Vestibulum laryngis
- 15 Rima vestibuli
- 16 Labium vocale
- 17 Glottis
- 18 Rima glottidis
- 19 Pars intermembranacea
- 20 Pars intercartilaginea
- 21 Ventriculus laryngis [Morgagnii]
- 22 Appendix ventriculi laryngis
- 23 Tunica mucosa laryngis
- 24 Membrana elastica laryngis
- 25 Conus elasticus
- 26 Plica glossoepiglottica mediana
- 27 Plica glossoepiglottica lateralis
- 28 Plica aryepiglottica
- 29 Plica nervi laryngei
- 30 Plica ventricularis
- 31 Plica vocalis
- 32 Macula flava
- 33 Aditus glottidis inferior
- 34 Aditus glottidis superior
- 35 Incisura interarytaenoidea
- 36 Gl. laryngeae
- 37 Gl. laryngeae anteriores
- 38 Gl. laryngeae mediae
- 39 Gl. laryngeae posteriores
- 40 Noduli lymphatici laryngei
- 41 TRACHEA ET BRONCHI
- 42 Cartilagines tracheales
- 43 Ligg. annularia [trachealia]
- 44 Paries membranacea
- 45 Gl. tracheales
- 46 Bifurcatio tracheae
- 47 Bronchus [dexter et sinister]
- 48 Rami bronchiales
- 49 Ramus bronchialis eparterialis
- 50 Rami bronchiales hyparteriales
- 51 Tunica muscularis
- 52 Tela submucosa
- 53 Tunica mucosa
- 54 Gl. tracheales
- 55 Gl. bronchiales
- 56 PULMO
- 57 Basis pulmonis
- 58 Apex pulmonis
- 59 Suleus subclavius
- 60 Facies costalis
- 61 Facies mediastinalis
- 62 Facies diaphragmatica
- 63 Margo anterior
- 64 Margo inferior
- 65 Hilus pulmonis
- 66 Radix pulmonis
- 67 Incisura cardiaca
- 68 Lobus superior
- 69 Lobus medius
- 70 Lobus inferior
- 71 Incisura interlobaris
- 72 Lobuli pulmonum
- 73 Rami bronchiales
- 74 Bronchioli
- 75 Bronchioli respiratorii
- 76 Ductuli alveolares
- 77 Alveoli pulmonum
- 78 Lymphoglandulae bronchiales
- 79 Noduli lymphatici bronchiales
- 80 Lymphoglandulae pulmonales

- | | |
|-----------------------------|--|
| 1 CAVUM THORACIS | 20 Cavum mediastinale ante-
rius |
| 2 Fascia endothoracica | 21 Cavum mediastinale poste-
rius |
| 3 Cavum pleurae | |
| 4 Pleura | 22 GL. THYREOIDEA |
| 5 Cupula pleurae | 23 Isthmus gl. thyreoideae |
| 6 Pleura pulmonalis | 24 (Lobus pyramidalis) |
| 7 Pleura parietalis | 25 Lobus [dexter et sinister] |
| 8 Pleura mediastinales | 26 Lobuli gl. thyreoideae |
| 9 Laminae mediastinales | 27 Stroma gl. thyreoideae |
| 10 Pleura pericardiaca | 28 (Gl. thyreoideae accessoriae) |
| 11 Pleura costalis | 29 (Gl. thyreoidea accessoria
suprahyoidea) |
| 12 Pleura diaphragmatica | |
| 13 Sinus pleurae | 30 GLOMUS CAROTICUM |
| 14 Sinus phrenicocostalis | |
| 15 Sinus costomediastinalis | 31 THYMUS |
| 16 Lig. pulmonale | 32 Lobus [dexter et sinister] |
| 17 Plicae adiposae | 33 Tractus centralis |
| 18 Villi pleurales | 34 Lobuli thymi |
| 19 Septum mediastinale | |

35 Apparatus urogenitalis

- | | |
|----------------------------|---|
| 36 ORGANA UROPOETICA | 54 Tubuli renales recti |
| 37 Ren | 55 Substantia corticalis |
| 38 Margo lateralis | 56 Substantia medullaris |
| 39 Margo medialis | 57 Lobi renales |
| 40 Hilus renalis | 58 Pyramides renales [Malpighii] |
| 41 Sinus renalis | 59 Basis pyramidis |
| 42 Facies anterior | 60 Papillae renales |
| 43 Facies posterior | 61 Area cribrosa |
| 44 Extremitas superior | 62 Foramina papillaria |
| 45 Extremitas inferior | 63 Columnae renales [Bertini] |
| 46 (Impressio muscularis) | 64 Lobuli corticales |
| 47 (Impressio hepatica) | 65 Pars radiata [Processus Fer-
reini] |
| 48 (Impressio gastrica) | 66 Pars convoluta |
| 49 Capsula adiposa | 67 Corpuscula renis [Malpighii] |
| 50 Tunica fibrosa | 68 Glomerula |
| 51 Tunica muscularis | 69 Capsula glomeruli |
| 52 Tubuli renales | 70 Pelvis renalis |
| 53 Tubuli renales contorti | 71 Calyces renales |

- 1 Calyces renales majores
- 2 Calyces renales minores
- 3 Gl. pelvis renalis
 - 4 *Arteriae renis*
- 5 Aa. interlobares renis
 - 6 Arteriae arciformes
 - 7 Arteriae interlobulares
 - 8 Vas afferens
 - 9 Vas efferens
 - 10 Rami capsulares
 - 11 Arteriolae rectae
 - 12 Aa. nutriciae pelvis renalis
- 13 *Venae renis*
- 14 Vv. interlobares
 - 15 Venae arciformes
 - 16 Venae interlobulares
 - 17 Venulae rectae
 - 18 Venae stellatae
- 19 URETER
 - 20 Pars abdominalis
 - 21 Pars pelvina
 - 22 Tunica adventitia
 - 23 Tunica muscularis
 - 24 Stratum externum
 - 25 Stratum medium
 - 26 Stratum internum
 - 27 Tunica mucosa
 - 28 Gl. mucosae ureteris
- 29 VESICA URINARIA
 - 30 Vertex vesicae
 - 31 Corpus vesicae
 - 32 Fundus vesicae
 - 33 Lig. umbilicale medium
 - 34 Urachus*
 - 35 Tunica serosa
 - 36 Tunica muscularis
 - 37 Stratum externum
 - 38 Stratum medium
 - 39 Stratum internum
 - 40 M. pubovesicalis
 - 41 M. rectovesicalis
 - 42 Tela submucosa
 - 43 Tunica mucosa
 - 44 Gl. vesicales
 - 45 Noduli lymphatici vesicales
 - 46 Trigonum vesicae [Lieutaudi]
 - 47 Uvula vesicae
 - 48 Plica ureterica
 - 49 Orificium ureteris
 - 50 Orificium urethrae internum
 - 51 Annulus urethralis
- 52 GLANDULA SUPRARENALIS
 - 53 Substantia corticalis
 - 54 Substantia medullaris
 - 55 Hilus gl. suprarenalis
 - 56 Facies anterior
 - 57 Facies posterior
 - 58 Basis gl. suprarenalis
 - 59 Apex suprarenalis [gl. dextrae]
 - 60 Margo superior
 - 61 Margo medialis
 - 62 Vena centralis
 - 63 (Gl. suprarenalis accessoriae)
- 64 ORGANA GENITALIA
- 65 ORGANA GENITALIA VIRILIA
 - 66 *Testis*
 - 67 Extremitas superior
 - 68 Extremitas inferior
 - 69 Facies lateralis
 - 70 Facies medialis
 - 71 Margo anterior
 - 72 Margo posterior
 - 73 Tunica albuginea
 - 74 Mediastinum testi [Corpus Highmori]
 - 75 Septula testis

- | | |
|-----------------------------------|--------------------------------------|
| 1 Praeputium | 38 Facies medialis |
| 2 Frenulum praeputii | 39 Facies lateralis |
| 3 Raphe penis | 40 Margo liber |
| 4 Corpus cavernosum penis | 41 Margo mesovariicus |
| 5 Corpus cavernosum urethrae | 42 Extremitas tubaria |
| 6 Bulbus urethrae | 43 Extremitas uterina |
| 7 Hemisphaeria bulbi urethrae | 44 Stroma ovarii |
| 8 Septum bulbi urethrae | 45 Folliculi oophori primarii |
| 9 Tunica albuginea corporum | 46 Folliculi oophori vesiculosi |
| cavernosorum | [Graafi] |
| 10 Septum penis | 47 Theca folliculi |
| 11 Trabeculae corporum caverno- | 48 Tunica externa |
| sorum | 49 Tunica interna |
| 12 Cavernae corporum caverno- | 50 Liquor folliculi |
| sorum | 51 Stratum granulosum |
| 13 Arteriae helicinae | 52 Cumulus oophorus |
| 14 Venae cavernosae | 53 Ovulum |
| 15 Lig. suspensorium penis | 54 Corpus luteum |
| 16 Fascia penis | 55 Corpus albicans |
| 17 Gl. praeputiales | 56 Lig. ovarii proprium |
| 18 Smegma praeputii | |
| | 57 Tuba uterina [<i>Falloppii</i>] |
| 19 URETHRA VIRILIS | 58 Ostium abdominale tubae uter- |
| 20 Pars prostatica | inae |
| 21 Crista urethralis | 59 Infundibulum tubae uterinae |
| 22 Colliculus seminalis | 60 Fimbriae tubae |
| 23 Utriculus prostaticus | 61 Fimbria ovarica |
| 24 Pars membranacea | 62 Ampulla tubae uterinae |
| 25 Pars cavernosa | 63 Isthmus tubae uterinae |
| 26 Fossa navicularis urethrae | 64 Pars uterina |
| [Morgagnii] | 65 Ostium uterinum tubae |
| 27 (Valvula fossae navicularis | 66 Tunica serosa |
| 28 Orificium urethrae externum | 67 Tunica adventitia |
| 29 Lacunae urethrales [Morgagnii] | 68 Tunica muscularis |
| 30 Gl. urethrales [Littrei] | 69 Stratum longitudinale |
| | 70 Stratum circulare |
| 31 SCROTUM | 71 Tela submucosa |
| 32 Raphe scroti | 72 Tunica mucosa |
| 33 Septum scroti | 73 Plicae tubariae |
| 34 Tunica dartos | 74 Plicae ampullares |
| | 75 Plicae isthmicae |
| 35 ORGANA GENITALIA MU- | |
| LIEBRIA | 76 Uterus |
| 36 Ovarium | 77 Corpus uteri |
| 37 Hilus ovarii | |

- 1 Fundus uteri
- 2 Margo lateralis
- 3 Facies vesicalis
- 4 Facies intestinalis
- 5 Cavum uteri
- 6 Orificium internum uteri
- 7 Cervix [uteri]
- 8 Portio supravaginalis [cervicis]
- 9 Portio vaginalis [cervicis]
- 10 Orificium externum uteri
 - 11 Labium anterius
 - 12 Labium posterius
- 13 Canalis cervicis uteri
- 14 Plicae palmae
- 15 Gl. cervicales [uteri]
- 16 Parametrium
- 17 Tunica serosa [Perimetrium]
- 18 Tunica muscularis
- 19 Tunica muscularis cervicis
- 20 Tunica mucosa
 - 21 Gl. uterinae
- 22 M. rectouterinus
- 23 Lig. teres uteri
- 24 (Processus vaginalis peritonaei)
- 25 *Vagina*
- 26 Fornix vaginae
- 27 Paries anterior
- 28 Paries posterior
- 29 Hymen [femininus]
- 30 Carunculae hymenales
- 31 Tunica muscularis
- 32 Tunica mucosa
- 33 Noduli lymphatici vaginales
- 34 Rugae vaginales
- 35 Columnae rugarum
 - 36 Columna rugarum posterior
 - 37 Columna rugarum anterior
 - 38 Carina urethralis [vaginae]
- 39 *Epoophoron*
- 40 Ductus epoophori longitudinalis [Gartneri]
- 41 Ductuli transversi
- 42 Appendices vesiculosi [Morgagnii]
- 43 *Paroophoron*
- 44 PARTES GENITALES EXTERNAE
- 45 Pudendum muliebre
- 46 Labium majus pudendi
- 47 Commissura labiorum anterior
- 48 Commissura labiorum posterior
- 49 Frenulum labiorum pudendi
- 50 Rima pudendi
- 51 Fossa navicularis [vestibuli vaginae]
- 52 Labium minus pudendi
- 53 Vestibulum vaginae
- 54 Bulbus vestibuli
- 55 Gl. sebaceae
- 56 Gl. vestibulares minores
- 57 Orificium vaginae
- 58 Gl. vestibularis major [Bartholini]
- 59 CLITORIS
- 60 Crus clitoridis
- 61 Cornus clitoridis
- 62 Glans clitoridis
- 63 Frenulum clitoridis
- 64 Praeputium clitoridis
 - 65 Smegma clitoridis
- 66 Corpus cavernosum clitoridis
- 67 Septum corporum cavernosorum
- 68 Fascia clitoridis
- 69 Lig. suspensorium clitoridis
- 70 URETHRA MULIEBRIS
- 71 Orificium urethrae externum
- 72 Corpus spongiosum urethrae
- 73 Tunica muscularis
- 74 Stratum circulare
- 75 Stratum longitudinale
- 76 Tunica submucosa
- 77 Tunica mucosa

- 1 Gl. urethrales
- 2 Crista urethralis
- 3 (Ductus paraurethrales)
- 4 Termin ontogenetici
- 5 Membranae deciduae*
 - 6 Decidua vera*
 - 7 Decidua capsularis*
 - 8 Decidua basalis*
- 9 Placenta*
 - 10 Placenta uterina*
 - 11 Placenta foetalis*
- 12 Funiculus umbilicalis*
- 13 Corpus Wolffii*
- 14 Ductus Wolffii*
- 15 Ductus Muellieri*
- 16 Sinus urogenitalis*
- 17 PERINEUM
- 18 Raphe perinei
- 19 Musculi perinei
- 20 Diaphragma pelvis
- 21 M. levator ani
 - 22 Arcus tendineus m. levatoris ani
- 23 M. coccygeus [vide p. 197]
- 24 M. sphincter ani externus
 - 25 Lig. anococcygeum
- 26 Fascia pelvis
 - 27 Fascia endopelvina
 - 28 Fascia diaphragmatis pelvis superior
 - 29 Arcus tendineus fasciae pelvis
 - 30 Lig. puboprostaticum [pubovesicale] medium
 - 31 Lig. puboprostaticum [pubovesicale] laterale
- 32 Fascia diaphragmatis pelvis inferior
- 33 Diaphragma urogenitale
- 34 M. transversus perinei profundus
- 35 M. sphincter urethrae membranaceae
- 36 Fascia diaphragmatis urogenitalis superior
- 37 Fascia diaphragmatis urogenitalis inferior
- 38 Lig. transversum pelvis
- 39 Fascia prostatae
- 40 Fascia obturatoria
- 41 Fossa ischiorectalis
- 42 M. transversus perinei superficialis
- 43 M. ischiocavernosus
- 44 M. bulbocavernosus
- 45 Fascia superficialis perinei
- 46 PERITONAEUM
- 47 Tunica serosa
- 48 Tela subserosa
- 49 Peritoneum parietale
- 50 Peritoneum viscerale
- 51 Cavum peritonaei
- 52 Mesenterium commune*
- 53 Mesenterium
 - 54 Radix mesenterii
 - 55 Lamina mesenterii propria
- 56 Mesocolon
 - 57 Mesocolon transversum
 - 58 Mesocolon ascendens
 - 59 Mesocolon descendens
 - 60 Mesocolon sigmoideum
- 61 Mesorectum
- 62 Mesenteriolum processus vermiformis
- 63 Mesogastrium*
- 64 Omentum minus
 - 65 Lig. hepatogastricum
 - 66 Lig. hepatoduodenale
 - 67 (Lig. hepatocolicum)
- 68 Lig. gastrolienale
- 69 Lig. gastrocolicum
- 70 Omentum majus
- 71 Bursa omentalis
 - 72 Vestibulum bursae omentalis
 - 73 Recessus superior omentalis
 - 74 Recessus inferior omentalis
 - 75 Recessus lienalis
 - 76 Plica gastropancreatica
 - 77 Foramen epiploicum [Winslowi]

- | | |
|-----------------------------------|---|
| 1 Lig. phrenicocolicum | 21 (Recessus phrenicohepatici) |
| 2 Lig. phrenicocolienale | 22 Plica umbilicalis media |
| 3 Lig. falciforme hepatis | 23 Plica umbilicalis lateralis |
| 4 Lig. coronarium hepatis | 24 Plica epigastrica |
| 5 Lig. triangulare dextrum | 25 Plica pubovesicalis |
| 6 Lig. triangulare sinistrum | 26 Plica vesicalis transversa |
| 7 Lig. hepatorenale | 27 Mesorchium* |
| 8 (Lig. duodenorenale) | 28 Processus vaginalis peritonaei* |
| 9 Recessus duodenojejunalis | 29 Lig. latum uteri |
| 10 Plica duodenojejunalis | 30 Mesometrium |
| 11 (Plica duodenomesocolica) | 31 Mesosalpinx |
| 12 Recessus intersigmoideus | 32 Mesovarium |
| 13 Recessus iliocaecalis superior | 33 Bursa ovarica |
| 14 Recessus iliocaecalis inferior | 34 Lig. suspensorium ovarii |
| 15 Plica iliocaecalis | 35 Plica rectouterina [Douglasi] |
| 16 Fossa caecalis | 36 Excavatio rectouterina [Cavum
Douglasi] |
| 17 Recessus retrocaecalis | 37 Excavatio vesicouterina |
| 18 Plica caecalis | 38 Excavatio rectovesicalis |
| 19 Recessus paracolici | 39 Spatium retroperitoneale |
| 20 (Fossa iliacosubfascialis) | |

1 ANGIOLOGIA

- | | |
|---------------------|--------------------------------|
| 2 Vas collaterale | 17 Emissarium |
| 3 Vas anastomoticum | 18 Corpus cavernosum |
| 4 Ramus communicans | 19 Vas capillare |
| 5 Plexus vasculosus | 20 Vas lymphaticum |
| 6 Rete vasculosum | 21 Plexus lymphaticus |
| 7 Rete mirabile | 22 Lymphoglandula |
| 8 Arteria | 23 Nodulus lymphaticus |
| 9 Arteriola | 24 Cisterna |
| 10 Vena | 25 Tunica externa [adventicia] |
| 11 Vena cutanea | 26 Tunica media |
| 12 Vena comitans | 27 Tunica intima |
| 13 Venula | 28 Vasa vasorum |
| 14 Plexus venosus | 29 Vagina vasorum |
| 15 Rete venosum | 30 Sanguis |
| 16 Sinus [venosus] | 31 Lympha |

32 *C o r*

- | | |
|------------------------------------|-------------------------------|
| 33 Basis cordis | 50 Septum musculare ventricu- |
| 34 Facies sternocostalis | lorum |
| 35 Facies diaphragmatica | 51 Septum membranaceum |
| 36 Apex cordis | ventriculorum |
| 37 Incisura [apicis] cordis | 52 Atrium cordis |
| 38 Sulcus longitudinalis anterior | 53 Auricula cordis |
| 39 Sulcus longitudinalis posterior | 54 Septum atriorum |
| 40 Sulcus coronarius | 55 Pars membranacea septi |
| 41 Pericardium | atriorum |
| 42 Liquor pericardii | 56 Ostium venosum |
| 43 Ligg. sternopericardiaca | 57 Ostium arteriosum |
| 44 Sinus transversus pericardii | 58 Trabeculae carneae |
| 45 Epicardium | 59 Vortex cordis |
| 46 Myocardium | 60 Mm. papillares |
| 47 Endocardium | 61 Chordae tendineae |
| 48 Ventriculus cordis | 62 Trigona fibrosa |
| 49 Septum ventriculorum | 63 Annuli fibrosi |

- 1 ATRIUM DEXTRUM
- 2 Mm. pectinati
- 3 Suleus terminalis atrii dexti
- 4 Crista terminalis
- 5 Sinus venarum [cavarum]
- 6 Limbus fossae ovalis [Vieussenii]
- 7 Auricula dextra
- 8 Tuberculum intervenosum
[Loweri]
- 9 Valvula venae cavae inferioris [Eustachii]
- 10 Fossa ovalis
- 11 Valvula sinus coronarii
[Thebesii]
- 12 Foramina venarum minimarum
[Thebesii]
- 13 VENTRICULUS DEXTER
- 14 Valvula tricuspidalis
- 15 Cuspis anterior
- 16 Cuspis posterior
- 17 Cuspis medialis
- 18 Crista supraventricularis
- 19 Conus arteriosus
- 20 Valvulae semilunares a. pulmonalis
- 21 Valvula semilunaris anterior
- 22 Valvula semilunaris dextra
- 23 Valvula semilunaris sinistra
- 24 Noduli valvularum semilunarium
- 25 Lunulae valvularum semilunarium
- 26 ATRIUM SINISTRUM
- 27 Auricula sinistra
- 28 Valvula foraminis ovalis
- 29 VENTRICULUS SINISTER
- 30 Valvula bicuspidalis [mitralis]
- 31 Cuspis anterior
- 32 Cuspis posterior
- 33 Valvulae semilunares aortae
- 34 Valvula semilunaris posterior
- 35 Valvula semilunaris dextra
- 36 Valvula semilunaris sinistra
- 37 Noduli valvularum semilunarium [Arantii]
- 38 Lunulae valvularum semilunarium

39 Arteriae

- 40 A. PULMONALIS
- 41 Ramus dexter
- 42 Ramus sinister
- 43 Ductus arteriosus [Botalli]*
- 44 Ligamentum arteriosum
- 45 AORTA
- 46 Aorta ascendens
- 47 Bulbus aortae
- 48 Sinus aortae [Valsalvae]
- 49 Arcus aortae
- 50 Isthmus aortae
- 51 Aorta descendens
- 52 A. coronaria [cordis] dextra
- 53 Ramus descendens posterior
- 54 A. coronaria [cordis] sinistra
- 55 Ramus circumflexus
- 56 Ramus descendens anterior
- 57 A. ANONYMA
- 58 (A. thyreoidea ima)
- 59 A. CAROTIS COMMUNIS
- 60 A. CAROTIS EXTERNA
- 61 A. thyreoidea superior
- 62 Ramus hyoideus
- 63 Ramus sternocleidomastoideus
- 64 A. laryngea superior
- 65 Ramus cricothyreoideus

- 1 Ramus anterior
- 2 Ramus posterior
- 3 Rami glandulares
- 4 *A. pharyngea ascendens*
- 5 *A. meningea posterior*
- 6 Rami pharyngei
- 7 *A. tympanica inferior*
8. *A. lingualis*
- 9 Ramus hyoideus
- 10 *A. sublingualis*
- 11 Rami dorsales linguae
- 12 *A. profunda linguae*
- 13 *A. maxillaris externa*
- 14 *A. palatina ascendens*
- 15 Ramus tonsillaris
- 16 *A. submentalis*
- 17 Rami glandulares
- 18 *A. labialis inferior*
- 19 *A. labialis superior*
- 20 *A. angularis*
- 21 *A. sternocleidomastoidea*
- 22 *A. occipitalis*
- 23 Ramus mastoideus
- 24 Ramus auricularis
- 25 Rami musculares
- 26 Ramus descendens
- 27 (*Ramus meningeus*)
- 28 Rami occipitales
- 29 *A. auricularis posterior*
- 30 *A. stylomastoidea*
- 31 *A. tympanica posterior*
- 32 Rami mastoidei
- 33 Ramus stapedius
- 34 Ramus auricularis
- 35 Ramus occipitalis
- 36 *A. temporalis superficialis*
- 37 Rami parotidei
- 38 *A. transversa faciei*
- 39 Rami auriculares anteriores
- 40 *A. zygomaticoorbitalis*
- 41 *A. temporalis media*
- 42 Ramus frontalis
- 43 Ramus parietalis
- 44 *A. maxillaris interna*
- 45 *A. auricularis profunda*
- 46 *A. tympanica anterior*
- 47 *A. alveolaris inferior*
- 48 *R. mylohyoideus*
- 49 *A. mentalis*
- 50 *A. meningea media*
- 51 (*Ramus meningeus accessorius*)
- 52 Ramus petrosus superficialis
- 53 *A. tympanica superior*
- 54 *A. masseterica*
- 55 *A. temporalis profunda posterior*
- 56 *A. temporalis profunda anterior*
- 57 Rami pterygoidei
- 58 *A. buccinatoria*
- 59 *A. alveolaris superior posterior*
- 60 *A. infraorbitalis*
- 61 *Aa. alveol. superiores anteriores*
- 62 *A. palatina descendens*
- 63 *A. canalis pterygoidei [Vidii]*
- 64 *A. palatina major*
- 65 *Aa. palatinae minores*
- 66 *A. sphenopalatina*
- 67 *Aa. nasales posteriores laterales et septi*
- 68 *A. CAROTIS INTERNA*
- 69 Ramus caroticotympanicus
- 70 *A. ophthalmica*
- 71 *A. centralis retinae*
- 72 *A. lacrimalis*
- 73 *Aa. palpebrales laterales*
- 74 Rami musculares
- 75 *Aa. ciliares posteriores breves*
- 76 *Aa. ciliares posteriores longae*

- 1 Aa. ciliares anteriores
- 2 Aa. conjunctivales anteriores
- 3 Aa. conjunctivales posteriores
- 4 Aa. episclerales
- 5 A. supraorbitalis
- 6 A. ethmoidalis posterior
- 7 A. ethmoidalis anterior
- 8 A. meningeus anterior
- 9 Aa. palpebrales mediales
- 10 Arcus tarseus superior
- 11 Arcus tarseus inferior
- 12 A. frontalis
- 13 A. dorsalis nasi
- 14 *Aa. cerebri*
- 15 A. communicans posterior
- 16 A. chorioidea
- 17 A. cerebri anterior
- 18 A. communicans anterior
- 19 A. cerebri media
- 20 A. SUBCLAVIA
- 21 *A. vertebralis*
- 22 Rami spinales
- 23 A. spinalis posterior
- 24 A. spinalis anterior
- 25 Ramus meningeus
- 26 A. cerebelli inferior posterior
- 27 *A. basilaris*
- 28 A. cerebelli inferior anterior
- 29 A. auditiva interna
- 30 Rami ad pontem
- 31 A. cerebelli superior
- 32 A. cerebri posterior
- 33 Circulus arteriosus [Willisi]
- 34 *A. mammaria interna*
- 35 Aa. mediastinales anteriores
- 36 Aa. thymicae
- 37 Rami bronchiales
- 38 A. pericardiacophrenica
- 39 Rami sternales
- 40 Rami perforantes
- 41 Rami mammarii
- 42 Rami musculares
- 43 Rami cutanei
- 44 (Ramus costalis lateralis)
- 45 Rami intercostales
- 46 A. musculophrenica
- 47 A. epigastrica superior
- 48 *Truncus thyreocervicalis*
- 49 *A. thyreoidea inferior*
- 50 A. laryngea inferior
- 51 Rami pharyngei
- 52 Rami oesophagei
- 53 Rami tracheales
- 54 Rami glandulares
- 55 *A. cervicalis ascendens*
- 56 Rami spinales
- 57 Rami musculares
- 58 Ramus profundus
- 59 *A. cervicalis superficialis*
- 60 *A. transversa scapulae*
- 61 Ramus acromialis
- 62 *Truncus costocervicalis*
- 63 A. intercostalis suprema
- 64 Rami dorsales
- 65 Rami spinales
- 66 A. cervicalis profunda
- 67 *A. transversa colli*
- 68 Ramus ascendens
- 69 Ramus descendens
- 70 A. AXILLARIS
- 71 Rami subscapulares

- 1 *A. thoracalis suprema*
- 2 *A. thoracoacromialis*
- 3 Ramus acromialis
- 4 Rete acromiale
- 5 Ramus deltoideus
- 6 Rami pectorales
- 7 *A. thoracalis lateralis*
- 8 Rami mammarii externi
- 9 *A. subscapularis*
- 10 *A. thoracodorsalis*
- 11 *A. circumflexa scapulae*
- 12 *A. circumflexa humeri anterior*
- 13 *A. circumflexa humeri posterior*
- 14 BRACHIALIS
- 15 *A. profunda brachii*
- 16 Aa. nutritiae humeri
- 17 R. deltoideus
- 18 *A. collateralis media*
- 19 *A. collateralis radialis*
- 20 *A. collateralis ulnaris superior*
- 21 *A. collateralis ulnaris inferior*
- 22 A. RADIALIS
- 23 *A. recurrens radialis*
- 24 Rami musculares
- 25 Ramus carpeus volaris
- 26 Ramus volaris superficialis
- 27 Ramus carpeus dorsalis
- 28 Rete carpi dorsale
- 29 Aa. metacarpeae dorsales
- 30 Aa. digitales dorsales
- 31 *A. princeps pollicis*
- 32 *A. volaris indicis radialis*
- 33 *Arcus volaris profundus*
- 34 Aa. metacarpeae volares
- 35 Rami perforantes
- 36 A. ULNARIS
- 37 Aa. recurrentes ulnares
- 38 Rete articulare cubiti
- 39 *A. interossea communis*
- 40 *A. interossea dorsalis*
- 41 *A. interossea recurrens*
- 42 *A. interossea volaris*
- 43 *A. mediana*
- 44 Rami musculares
- 45 Ramus carpeus dorsalis
- 46 Ramus carpeus volaris
- 47 Ramus volaris profundus
- 48 *Arcus volaris superficialis*
- 49 Aa. digitales volares communes
- 50 Aa. digitales volares propriae
- 51 AORTA THORACALIS
- 52 Rami viscerales
- 53 Aa. bronchiales
- 54 Aa. oesophageae
- 55 Rami pericardiaci
- 56 Rami parietales
- * 57 Rami mediastinales
- 58 Aa. phrenicae superiores
- 59 Aa. intercostales
- 60 Rami posteriores
- 61 Ramus spinalis
- 62 Rami musculares
- 63 Ramus cutaneus medialis
- 64 Ramus cutaneus lateralis
- 65 Rami anteriores
- 66 Rami musculares
- 67 Rami cutanei laterales
[pectorales et abdominales]
- 68 Ramus posterior

- 1 Ramus anterior
- 2 Rami mammarii laterales
- 3 Rami cutanei anteriores
[pectorales et abdominales]
- 4 Rami mammarii mediales
- 5 AORTA ABDOMINALIS
- 6 Rami parietales
- 7 *A. phrenica inferior*
- 8 Rami suprarenales superiores
- 9 *Aa. lumbales*
- 10 Ramus dorsalis
- 11 Ramus spinalis
- 12 *A. sacralis media*
- 13 *A. lumbalis ima*
- 14 Glomus coccygeum
- 15 Rami viscerales
- 16 *A. coeliaca*
- 17 *A. gastrica sinistra*
- 18 Rami oesophagei
- 19 *A. hepatica*
- 20 *A. gastrica dextra*
- 21 *A. hepatica propria*
- 22 Ramus dexter
- 23 *A. cystica*
- 24 Ramus sinister
- 25 *A. gastroduodenalis*
- 26 *A. pancreaticoduodenalis superior*
- 27 Rami pancreatici
- 28 Rami duodenales
- 29 *A. gastroepiploica dextra*
- 30 Rami epiploici
- 31 *A. lienalis*
- 32 Rami pancreatici
- 33 *A. gastroepiploica sinistra*
- 34 *Aa. gastricae breves*
- 35 Rami lienales
- 36 *A. mesenterica superior*
- 37 *Aa. intestinales*
- 38 *A. pancreaticoduodenalis inferior*
- 39 *Aa. jejunales*
- 40 *Aa. ileae*
- 41 *A. ileocolica*
- 42 *A. appendicularis*
- 43 *A. colica dextra*
- 44 *A. colica media*
- 45 *A. mesenterica inferior*
- 46 *A. colica sinistra*
- 47 *Aa. sigmoideae*
- 48 *A. haemorrhoidalis superior*
- 49 *A. suprarenalis media*
- 50 *A. renalis*
- 51 *A. suprarenalis inferior*
- 52 *A. spermatica interna*
- 53 *A. testicularis*
- 54 *A. ovarica*
- 55 *A. ILIACA COMMUNIS*
- 56 *A. HYPOGASTRICA*
- 57 Rami parietales
- 58 *A. iliolumbalis*
- 59 Ramus lumbalis
- 60 Ramus spinalis
- 61 Ramus iliacus
- 62 *A. sacralis lateralis*
- 63 Rami spinales
- 64 *A. obturatoria*
- 65 Ramus pubicus
- 66 Ramus anterior
- 67 Ramus posterior
- 68 *A. acetabuli*

- 1 *A. glutaea superior*
- 2 Ramus superior
- 3 Ramus inferior
- 4 *A. glutaea inferior*
- 5 *A. comitans n. ischiadici*
- 6 Rami viscerales
- 7 *A. umbilicalis*
- 8 Aa. vesicales superiores
- 9 [Ligamentum umbilicale laterale]
- 10 *A. vesicalis inferior*
- 11 *A. deferentialis*
- 12 *A. uterina*
- 13 *A. vaginalis*
- 14 Ramus ovarii
- 15 Ramus tubarius
- 16 *A. haemorrhoidalis media*
- 17 *A. pudenda interna*
- 18 *A. haemorrhoidalis inferior*
- 19 *A. perinei*
- 20 Aa. scrotales posteriores
- 21 Aa. labiales posteriores
- 22 *A. penis*
- 23 *A. urethralis*
- 24 *A. bulbi urethrae*
- 25 *A. bulbi vestibuli [vaginae]*
- 26 *A. profunda penis*
- 27 *A. dorsalis penis*
- 28 *A. clitoridis*
- 29 *A. profunda clitoridis*
- 30 *A. dorsalis clitoridis*
- 31 *A. ILIACA EXTERNA*
- 32 *A. epigastrica inferior*
- 33 Ramus pubicus
- 34 Ramus obturatorius
- 35 *A. spermatica externa*
- 36 *A. lig. teretis uteri*
- 37 *A. circumflexa ilium profunda*
- 38 *A. FEMORALIS*
- 39 *A. epigastrica superficialis*
- 40 *A. circumflexa ilium superficialis*
- 41 Aa. pudendae externae
- 42 Aa. scrotales anteriores
- 43 Aa. labiales anteriores
- 44 Rami inguinales
- 45 *A. profunda femoris*
- 46 *A. circumflexa femoris medialis*
- 47 *Ramus superficialis*
- 48 *Ramus profundus*
- 49 *Ramus acetabuli*
- 50 *A. circumflexa femoris lateralis*
- 51 *Ramus ascendens*
- 52 *Ramus descendens*
- 53 *A. perforans prima*
- 54 *A. nutricia femoris superior*
- 55 *A. perforans secunda*
- 56 *A. perforans tertia*
- 57 *A. nutricia femoris inferior*
- 58 *Rami musculares*
- 59 *A. genu suprema*
- 60 *Rami musculares*
- 61 *Ramus saphenus*
- 62 *Rami articulares*
- 63 *A. POPLITEA*
- 64 *A. genu superior lateralis*
- 65 *A. genu superior medialis*
- 66 *A. genu media*
- 67 Aa. surales
- 68 *A. genu inferior lateralis*
- 69 *A. genu inferior medialis*
- 70 *Rete articulare genu*
- 71 *Rete patellae*

- 1 *A. tibialis anterior*
 2 (*A. recurrens tibialis posterior*)
 3 *A. recurrens tibialis anterior*
 4 *A. malleolaris anterior lateralis*
 5 *A. malleolaris anterior medialis*
 6 *Rete malleolare mediale*
 7 *Rete malleolare laterale*
 8 *A. dorsalis pedis*
 9 *A. tarsea lateralis*
 10 *Aa. tarsae mediales*
 11 *A. arcuata*
 12 *Rete dorsale pedis*
 13 *Aa. metatarsae dorsales*
 14 *Aa. digitales dorsales*
 15 *Ramus plantaris profundus*

 16 *A. tibialis posterior*
 17 *Ramus fibularis*

 18 *A. peronea*
 19 *A. nutricia fibulae*
 20 *Ramus perforans*
 21 *Ramus communicans*
 22 *A. malleolaris posterior lateralis*
 23 *Rami calcanei laterales*
 24 *A. nutricia tibiae*
 25 *A. malleolaris posterior medialis*
 26 *Rami calcanei mediales*
 27 *Rete calcaneum*
 28 *A. plantaris medialis*
 29 *Ramus profundus*
 30 *Ramus superficialis*
 31 *A. plantaris lateralis*
 32 *Arcus plantaris*
 33 *Aa. metatarsae plantares*
 34 *Rami perforantes*
 35 *Aa. digitales plantares*

 36 *Vena e*

 37 *VENAE PULMONALES*
 38 *Vv. pulmonales dextrae*
 39 *Vv. pulmonales sinistralae*

 40 *Vv. CORDIS*
 41 *Sinus coronarius*
 42 *V. cordis magna*
 43 *V. posterior ventriculi sinistri*
 44 *V. obliqua atrii sinistri*
 [*Marshalli*]
 45 *Lig. v. cavae sinistralae*
 46 *V. cordis media*
 47 *V. cordis parva*
 48 *Vv. cordis anteriores*
 49 *Vv. cordis minimae*

 50 *VENA CAVA SUPERIOR*

 51 *Vv. ANONYMAE DEXTRA ET*
 SINISTRA
 52 *Vv. thyroideae inferiores*

 53 *V. thyroidea ima*
 54 *Plexus thyroideus impar*
 55 *V. laryngea inferior*
 56 *Vv. thymicae*
 57 *Vv. pericardicae*
 58 *Vv. phrenicae superiores*
 59 *Vv. mediastinales anteriores*
 60 *Vv. bronchiales anteriores*
 61 *Vv. tracheales*
 62 *Vv. oesophageae*
 63 *V. vertebralis*
 64 *V. cervicalis profunda*
 65 *V. mamma interna*
 66 *Vv. subcutaneae abdominis*
 67 *V. epigastrica superior*
 68 *V. intercostalis suprema*

 69 *V. JUGULARIS INTERNA*
 70 *Bulbus. venae jugularis superior*
 71 *V. canaliculi cochleae*

- 1 Bulbus v. jugularis inferior
- 2 Plexus pharyngeus
- 3 Vv. pharyngeae
- 4 Vv. meningeae
- 5 Vv. canalis pterygoidei [Vidii]
- 6 V. lingualis
- 7 Vv. dorsalis linguae
- 8 V. sublingualis
- 9 V. comitans n. hypoglossi
- 10 (Vv. thyreoideae superiores)
- 11 V. sternocleidomastoidea
- 12 V. laryngea superior
- 13 *Sinus durae matris*
- 14 Sinus transversus
- 15 Confluens sinuum
- 16 Vv. auditivae internae
- 17 Sinus occipitalis
- 18 Plexus basilaris
- 19 Sinus sagittalis superior
- 20 Sinus sagittalis inferior
- 21 Sinus rectus
- 22 Sinus petrosus inferior
- 23 Sinus petrosus superior
- 24 Sinus cavernosus
- 25 Sinus intercavernosus anterior
- 26 Sinus intercavernosus posterior
- 27 Sinus circularis
- 28 Sinus sphenoparietalis
- 29 Venae diploicae
- 30 V. diploica frontalis
- 31 V. diploica temporalis anterior
- 32 V. diploica temporalis posterior
- 33 V. diploica occipitalis
- 34 Emissarium parietale
- 35 Emissarium mastoideum
- 36 Emissarium condyloideum
- 37 Emissarium occipitale
- 38 Rete canalis hypoglossi
- 39 Rete foraminis ovalis
- 40 Plexus venosus caroticus internus
- 41 *Venae cerebri*
- 42 Vv. cerebri superiores
- 43 V. cerebri media
- 44 Vv. cerebri inferiores
- 45 Vv. cerebelli superiores
- 46 Vv. cerebelli inferiores
- 47 Vv. cerebri internae
- 48 V. cerebri magna [Galenii]
- 49 V. septi pellucidi
- 50 V. terminalis
- 51 V. basalis [Rosenthalii]
- 52 V. chorioidea
- 53 V. ophthalmomeningea
- 54 *V. ophthalmica superior*
- 55 V. nasofrontalis
- 56 V. ethmoidalis anterior
- 57 V. ethmoidalis posterior
- 58 V. lacrimalis
- 59 Vv. musculares
- 60 Vv. vorticosae
- 61 Vv. ciliares posteriores
- 62 Vv. ciliares anteriores
- 63 V. centralis retinae
- 64 Vv. episclerales
- 65 Vv. palpebrales
- 66 Vv. conjunctivales anteriores
- 67 Vv. conjunctivales posteriores
- 68 V. ophthalmica inferior
- 69 V. FACIALIS COMMUNIS
- 70 *V. facialis anterior*
- 71 V. angularis
- 72 Vv. frontales
- 73 V. supraorbitalis
- 74 Vv. palpebrales superiores
- 75 Vv. nasales externae
- 76 Vv. palpebrales inferiores
- 77 V. labialis superior

- 1 V. labialis inferior
- 2 Vv. massetericae
- 3 Vv. parotideae anteriores
- 4 V. palatina
- 5 V. submentalialis
- 6 V. *facialis posterior*
- 7 Vv. temporales superficiales
- 8 Vv. auriculares anteriores
- 9 Vv. parotideae posteriores
- 10 Vv. articulares mandibulae
- 11 Vv. tympanicae
- 12 V. stylomastoidea
- 13 V. transversa faciei
- 14 V. temporalis media
- 15 Plexus pterygoideus
- 16 Vv. meningeae mediae
- 17 Vv. temporales profundae
- 18 V. thyreoidea superior
- 19 V. JUGULARIS EXTERNA
- 20 V. occipitalis
- 21 V. auricularis posterior
- 22 V. jugularis anterior
- 23 Arcus venosus juguli
- 24 (V. mediana colli)
- 25 V. transversa scapulae
- 26 V. SUBCLAVIA
- 27 V. thoracoacromialis
- 28 Vv. transversae colli
- 29 V. *axillaris*
- 30 V. thoracalis lateralis
- 31 Vv. costoaxillares
- 32 Vv. thoracoepigastricae
- 33 Plexus venosus mamillae
- 34 Vv. brachiales
- 35 Vv. radiales
- 36 Vv. ulnares
- 37 V. cephalica
- 38 V. cephalica accessoria
- 39 V. basilica
- 40 V. mediana cubiti
- 41 (V. mediana antibrachii)
- 42 (V. mediana basilica)
- 43 (V. mediana cephalica)
- 44 Rete venosum dorsale manus
- 45 Vv. intercapitulares
- 46 Arcus volaris venosus superficialis
- 47 Arcus volaris venosus profundus
- 48 Vv. digitales volares communes
- 49 Vv. metacarpeae dorsales
- 50 Vv. metacarpeae volares
- 51 Vv. digitales volares propriae
- 52 Arcus venosi digitales
- 53 V. *azygos*
- 54 V. hemiazygos
- 55 V. hemiazygos accessoria
- 56 Vv. intercostales
- 57 Ramus dorsalis
- 58 Ramus spinalis
- 59 Vv. oesophageae
- 60 Vv. bronchiales posteriores
- 61 V. lumbalis ascendens
- 62 Vv. basivertebrales
- 63 Plexus venosi vertebrales externi
- 64 Plexus venosi vertebrales anteriores
- 65 Plexus venosi vertebrales posteriores
- 66 Plexus venosi vertebrales interni
- 67 Retia venosa vertebrarum
- 68 Sinus vertebrales longitudinales
- 69 Vv. intervertebrales
- 70 Vv. spinales externae anteriores

- 1 Vv. spinales externae posteriores
- 2 Vv. spinales internae
- 3 V. CAVA INFERIOR
- 4 Radices parietales
- 5 V. phrenica inferior
- 6 Vv. lumbales
- 7 Radices viscerales
- 8 Vv. hepaticae
- 9 Vv. renales
- 10 Vv. suprarenales
- 11 V. spermatica
- 12 V. testicularis
- 13 V. ovarica
- 14 Plexus pampiniformis
- 15 VENA PORTAE
- 16 V. coronaria ventriculi
- 17 V. mesenterica superior
- 18 Vv. intestinales
- 19 V. gastroepiploica dextra
- 20 Vv. pancreaticae
- 21 V. ileocolica
- 22 Vv. colicae dextrae
- 23 V. colica media
- 24 Vv. pancreaticoduodenales
- 25 Vv. duodenales
- 26 V. mesenterica inferior
- 27 V. colica sinistra
- 28 Vv. sigmoideae
- 29 V. haemorrhoidalis superior
- 30 V. lienalis
- 31 Vv. gastricae breves
- 32 V. gastroepiploica sinistra
- 33 V. cystica
- 34 Vena umbilicalis*
- 35 Ductus venosus [Arantii]*
- 36 Vv. parumbilicales [Sappeyi]
- 37 VENA ILIACA COMMUNIS
- 38 V. sacralis media
- 39 V. hypogastrica
- 40 Vv. glutaeae superiores
- 41 Vv. glutaeae inferiores
- 42 Vv. obturatoriae
- 43 Vv. sacrales laterales
- 44 V. iliolumbalis
- 45 Plexus sacralis anterior
- 46 Plexus haemorrhoidalis
- 47 Plexus vesicalis
- 48 Plexus pudendalis
- 49 V. dorsalis penis
- 50 Vv. profundae penis
- 51 V. dorsalis clitoridis
- 52 Vv. profundae clitoridis
- 53 Vv. uterinae
- 54 Plexus uterovaginalis
- 55 V. haemorrhoidalis media
- 56 Vv. haemorrhoidales inferiores
- 57 Vv. scrotales posteriores
- 58 V. iliaca externa
- 59 V. epigastrica inferior
- 60 V. circumflexa ilium profunda
- 61 V. femoralis
- 62 Vv. dorsales penis subcutaneae
- 63 Vv. scrotales anteriores
- 64 Vv. pudendae externae
- 65 V. epigastrica superficialis
- 66 V. saphena magna
- 67 V. saphena accessoria
- 68 V. circumflexa ilium superficialis
- 69 Vv. circumflexae femoris mediales
- 70 Vv. circumflexae femoris laterales
- 71 Vv. comitantes
- 72 Vv. profundae femoris
- 73 Vv. perforantes

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|--------------------------------|----------------------------------|
| 1 V. saphena parva | 9 Vv. digitales communes pedis |
| 2 V. femoropoplitea | 10 Vv. metatarsae dorsales pedis |
| 3 Vv. peronaeae | 11 Vv. intercapitulares |
| 4 Vv. popliteae | 12 Rete venosum plantare |
| 5 Vv. tibiales posteriores | 13 Arcus venosus plantaris |
| 6 Vv. tibiales anteriores | 14 Vv. metatarsae plantares |
| 7 Rete venosum dorsale pedis | 15 Vv. digitales pedis dorsales |
| 8 Arcus venosus dorsalis pedis | 16 Vv. digitales plantares |

17 *Systema lymphaticum*

- | | |
|--|--------------------------------------|
| 18 VASA LYMPHATICA | 42 Lymphoglandulae cervicales |
| 19 Vasa lymphatica superficialia | profundae superiores |
| 20 Vasa lymphatica profunda | 43 " cervicales profundae inferiores |
| 21 Truncus jugularis | 44 " linguales |
| 22 Truncus subclavius | 45 " axillares |
| 23 Truncus bronchomediastinales dexter | 46 " subscapulares |
| 24 Ductus lymphaticus dexter | 47 " pectorales |
| 25 <i>Ductus thoracicus</i> | 48 " epigastricae |
| 26 Trunci lumbales | 49 " cubitales superficiales |
| 27 Truncus intestinalis | 50 " cubitales profundae |
| 28 Cisterna chyli | 51 " tracheales |
| 29 <i>Lymphoglandulae</i> | 52 " bronchiales |
| 30 Vasa afferentia | 53 " intercostales |
| 31 Vasa efferentia | 54 " mediastinales posteriores |
| 32 Substantia corticalis | 55 " mediastinales anteriores |
| 33 Substantia medullaris | 56 " sternales |
| 34 Hilus | 57 " iliacae |
| 35 Lymphoglandulae occipitales | 58 " lumbales |
| 36 " auriculares posteriores | 59 " coeliacae |
| 37 " auriculares anteriores | 60 " gastricae superiores |
| 38 " submaxillares | 61 " gastricae inferiores |
| 39 " faciales profundae | 62 " hepaticae |
| 40 " parotideae | 63 " pancreaticolienales |
| 41 " cervicales superficiales | 64 " mesentericae |
| | 65 " mesocolicae |
| | 66 " hypogastricae |

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|--------------------------------------|----------------------------|
| 1 Lymphoglandulae sacrales | 9 Plexus axillaris |
| 2 “ inguinales | 10 Plexus mammarius |
| 3 “ subinguinales superficiales | 11 Plexus lumbalis |
| 4 “ subinguinales profundae | 12 Plexus aorticus |
| 5 “ popliteae | 13 Plexus sacralis medius |
| 6 (Lymphoglandula tibialis anterior) | 14 Plexus hypogastricus |
| | 15 Plexus coeliacus |
| | 16 Plexus iliacus externus |
| | 17 Plexus inguinalis |
| 7 PLEXUS LYMPHATICI | |
| 8 Plexus jugularis | |

1 NEUROLOGIA

- | | |
|---------------------------------|------------------------------|
| 2 Nervus | 11 Nuclei originis |
| 3 Ganglion | 12 Nuclei terminales |
| 4 Substantia alba | 13 Ramus communicans |
| 5 Substantia grisea | 14 Ramus anastomoticus |
| 6 Substantia gelatinosa | 15 Ramus muscularis |
| 7 Taenia telarum | 16 Nervus cutaneus |
| 8 Ependyma ventriculorum | 17 Nervus articularis |
| 9 Sulcus limitans ventriculorum | 18 Plexus nervorum spinalium |
| 10 Nuclei nervorum cerebralia | |

19 *Systema nervorum centrale*

- | | |
|----------------------------------|---|
| 20 MEDULLA SPINALIS | 39 <i>Sectiones medullae spinalis</i> |
| 21 Pars cervicalis | 40 Canalis centralis |
| 22 Intumescencia cervicalis | 41 Substantia grisea centralis |
| 23 Pars thoracalis | 42 Commissura anterior alba |
| 24 Pars lumbalis | 43 Commissura anterior grisea |
| 25 Intumescencia lumbalis | 44 Commissura posterior |
| 26 Conus medullaris | 45 Columnae griseae |
| 27 Filum terminale | 46 Columna anterior |
| 28 Ventriculus terminalis | 47 Columna lateralis |
| 29 Fissura mediana anterior | 48 Columna posterior |
| 30 Sulcus medianus posterior | 49 Cervix columnae posterioris |
| 31 Sulcus lateralis anterior | 50 Apex columnae posterioris |
| 32 Sulcus lateralis posterior | 51 Substantia gelatinosa [Rolandi] |
| 33 Sulcus intermedius posterior | 52 Nucleus dorsalis [Stillingi, Clarkii] |
| 34 (Sulcus intermedius anterior) | 53 Formatio reticularis |
| 35 Funiculi medullae spinalis | 54 Funiculus anterior |
| 36 Funiculus anterior | 55 Fasciculus cerebrospinalis anterior [pyramidalis anterior] |
| 37 Funiculus lateralis | |
| 38 Funiculus posterior | |

- | | |
|--|---|
| 1 Fasciculus anterior proprius
[Flechsigi] | 5 Fasciculus anterolateralis
superficialis [Gowersi] |
| 2 Funiculus lateralis | 6 Fasciculus lateralis proprius
[Flechsigi] |
| 3 Fasciculus cerebrospinalis
lateralis [pyramidalis
lateralis] | 7 Funiculus posterior |
| 4 Fasciculus cerebellospinalis | 8 Fasciculus gracilis [Golli] |
| | 9 Fasciculus cuneatus
[Burdachi] |

10 ENCEPHALON

11 *Rhombocephalon*

- | | |
|---|--|
| 12 MYELENCEPHALON | 41 Nuclei laterales |
| 13 Medulla
oblongata | 42 Nucleus olivaris inferior |
| 14 Fissura mediana posterior | 43 Hilus nuclei olivaris |
| 15 Fissura mediana anterior | 44 Nucleus olivaris accessorius
medialis |
| 16 Foramen caecum | 45 Nucleus olivaris accessorius
dorsalis |
| 17 Pyramis medullae oblongatae | 46 Nuclei arcuati |
| 18 Decussatio pyramidum | 47 Fibrae arcuatae internae |
| 19 Sulcus lateralis anterior | 48 Substantia reticularis grisea |
| 20 Sulcus lateralis posterior | 49 Substantia reticularis alba |
| 21 Oliva | 50 Fasciculus longitudinalis
medialis |
| 22 Corpus restiforme | 51 Stratum interolivare lemnisci |
| 23 Funiculus lateralis | 52 Decussatio lemniscorum |
| 24 Funiculus cuneatus | 53 Corpus restiforme |
| 25 Tuberculum cinereum | 54 Fasciculi corporis restiformis |
| 26 Funiculus gracilis | 55 Fibrae cerebelloolivares |
| 27 Clava | 56 Fasciculi pyramidales |
| 28 Fibrae arcuatae externae | 57 Fibrae arcuatae externae |
| 29 <i>Sectiones medullae
oblongatae</i> | 58 Ventriculus
quartus |
| 30 Raphe | 59 Fossa rhomboidea |
| 31 Stratum nucleare | 60 Pars inferior fossae rhomboideae |
| 32 Nucleus n. hypoglossi | 61 [Calamus scriptorius] |
| 33 Nucleus ambiguus | 62 Pars intermedia [fossa rhom-
boideae] |
| 34 Nucleus alae cinereae | 63 Recessus lateralis fossae
rhomboideae |
| 35 Tractus solitarius | 64 Pars superior fossae rhomboideae |
| 36 Nucleus tractus solitarii | 65 Sulcus limitans [fossae rhom-
boideae] |
| 37 Tractus spinalis n. trigemini | 66 Fovea inferior |
| 38 Nucleus tractus spinalis n. tri-
gemini | |
| 39 Nucleus funiculi gracilis | |
| 40 Nucleus funiculi cuneati | |

- 1 Fovea superior
- 2 Trigonum n. hypoglossi
- 3 Striae medullares
- 4 Eminentia medialis
- 5 Colliculus facialis
- 6 Ala cinerea
- 7 Area acustica
- 8 Locus caeruleus
- 9 Tegmen ventriculi quarti
- 10 Velum medullare posterius
- 11 Taenia ventriculi quarti
- 12 Obex
- 13 Lamina chorioidea epithelialis
- 14 (Apertura medialis ventriculi quarti
- 15 [Foramen Magendii])
- 16 (Apertura lateralis ventriculi quarti)
- 17 Fastigium
- 18 METENCEPHALON
- 19 Pons [Varolii]
- 20 Suleus basilaris
- 21 Fasciculus obliquus [pontis]
- 22 (Fila lateralia pontis)
- 23 Brachium pontis
- 24 *Sectiones pontis*
- 25 Pars dorsalis pontis
- 26 Raphe
- 27 Nucleus n. abducentis
- 28 Nuclei motorii n. trigemini
- 29 Radix descendens [mesencephalica] n. trigemini
- 30 Tractus spinalis n. trigemini
- 31 Nucleus tractus spinalis n. trigemini
- 32 Nucleus n. facialis
- 33 Radix n. facialis
- 34 Pars prima
- 35 Genu [internum]
- 36 Pars secunda
- 37 Nuclei n. acustici
- 38 Nuclei n. cochlearis
- 39 Nuclei n. vestibularis
- 40 Nucleus olivaris superior
- 41 Nucleus lemnisci lateralis
- 42 Fasciculus longitudinalis medialis
- 43 Formatio reticularis
- 44 Corpus trapezoideum
- 45 Lemniscus
- 46 Lemniscus medialis [sensitivus]
- 47 Lemniscus lateralis [acusticus]
- 48 Pars basilaris pontis
- 49 Fibrae pontis profundae
- 50 Fasciculi longitudinales [pyramidales]
- 51 Nuclei pontis
- 52 Fibrae pontis superficiales
- 53 Cerebellum
- 54 Gyri cerebelli
- 55 Sulci cerebelli
- 56 Vallecula cerebelli
- 57 Incisura cerebelli anterior
- 58 Incisura cerebelli posterior
- 59 Suleus horizontalis cerebelli
- 60 Fissura transversa cerebelli
- 61 Vermis
- 62 Lingula cerebelli
- 63 Vincula lingulae cerebelli
- 64 Lobulus centralis
- 65 Monticulus
- 66 Culmen
- 67 Declive
- 68 Folium vermis
- 69 Tuber vermis
- 70 Pyramis [vermis]
- 71 Uvula [vermis]
- 72 Nodulus
- 73 Hemisphaerium cerebelli
- 74 Facies superior
- 75 Ala lobuli centralis
- 76 Lobulus quadrangularis
- 77 Pars anterior
- 78 Pars posterior

- | | |
|--------------------------------|--|
| 1 Lobulus semilunaris superior | 20 Hilus nuclei dentati |
| 2 Facies inferior | 21 Nucleus fastigii |
| 3 Lobulus semilunaris inferior | 22 Nucleus globosus |
| 4 Lobulus biventer | 23 Nucleus emboliformis |
| 5 Tonsilla cerebelli | 24 Capsula nuclei dentati |
| 6 Flocculus | |
| 7 (Flocculi secundarii) | 25 <i>Isthmus rhombencephali</i> |
| 8 Pedunculus flocculi | 26 Brachium conjunctivum [cerebelli] |
| 9 Nidus avis | 27 Lemniscus |
| 10 <i>Sectiones cerebelli</i> | 28 Lemniscus lateralis |
| 11 Corpus medullare | 29 Lemniscus medialis |
| 12 Laminae medullares | 30 Trigonum lemnisci |
| 13 Arbor vitae | 31 Velum medullare anterius |
| 14 Substantia corticalis | 32 Frenulum veli medullaris anterioris |
| 15 [Lamina basalis] | |
| 16 [Stratum cinereum] | 33 <i>Sectiones isthmi</i> |
| 17 [Stratum gangliosum] | [vide Pedunculus cerebri] |
| 18 Stratum granulosum | 34 Ganglion interpedunculare |
| 19 Nucleus dentatus | 35 Nucleus n. trochlearis |

36 *Cerebrum*

- | | | | |
|----|----------------------------------|----|----------------------------------|
| 37 | Facies convexa cerebri | 50 | <i>Sectiones pedunculi cere-</i> |
| 38 | Facies medialis cerebri | | <i>bri</i> |
| 39 | Basis cerebri | 51 | Tegmentum |
| | | 52 | Stratum griseum centrale |
| 40 | MESENCEPHALON | 53 | Formatio reticularis |
| | | 54 | Fasciculus longitudinalis |
| 41 | [Facies inferior] | | medialis |
| 42 | Fossa interpeduncularis [Tarini] | 55 | Radix descendens n. trigemini |
| 43 | Recessus anterior | 56 | Nucleus radialis descendentis n. |
| 44 | Recessus posterior | | trigemini |
| 45 | Substantia perforata posterior | 57 | Nucleus n. oculomotorii |
| | | 58 | Nuclei tegmenti |
| 46 | Pedunculus | 59 | Nucleus ruber |
| | cerebri | 60 | Decussationes tegmentorum |
| | | 61 | Decussatio brachii con- |
| 47 | Aquaeductus cerebri [Sylvii] | | junctivi |
| 48 | Sulcus lateralis | 62 | Lemniscus lateralis |
| 49 | Sulcus n. oculomotorii | 63 | Lemniscus medialis |
| | | 64 | Substantia nigra |
| | | 65 | Basis pedunculi |

- 1 Corpora quadrigemina
- 2 Lamina quadrigemina
- 3 Colliculus superior
- 4 Colliculus inferior
- 5 Brachium quadrigeminum superius
- 6 Brachium quadrigeminum inferius
- 7 *Sectiones corporum quadrigeminarum*
- 8 Stratum zonale
- 9 Stratum griseum colliculi superioris
- 10 Nucleus colliculi inferioris
- 11 Stratum album profundum
- 12 PROSENCEPHALON
- 13 *Diencephalon*
- 14 Ventriculus tertius
- 15 Aditus ad aquaeductum cerebri
- 16 Commissura posterior [cerebri]
- 17 Foramen interventriculare [Monroi]
- 18 Sulcus hypothalamicus [Monroi]
- 19 Massa intermedia
- 20 Recessus opticus
- 21 Recessus infundibuli
- 22 Commissura anterior [cerebri]
- 23 Recessus triangularis
- 24 *Hypothalamus*
- 25 Pars mamillaris hypothalami
- 26 Corpus mamillare
- 27 Pars optica hypothalami
- 28 Tuber cinereum
- 29 Infundibulum
- 30 Hypophysis
 - 31 Lobus anterior
 - 32 Lobus posterior
- 33 Tractus opticus
- 34 Radix medialis
- 35 Radix lateralis
- 36 Chiasma opticum
- 37 Lamina terminalis
- 38 *Sectiones hypothalami*
- 39 Nucleus hypothalamicus [Corpus Luysi]
- 40 Pars grisea hypothalami
- 41 Commissura superior [Meynerti]
- 42 Commissuri inferior [Guddeni]
- 43 Nuclei corporis mamillaris
- 44 Fasciculus thalamomamillaris [Vicq' d'Azyri]
- 45 Fasciculi pedunculomamillares
- 46 Pars tegmentalis
- 47 Pars basilaris
- 48 Ansa peduncularis
- 49 Ansa lenticularis
- 50 Pedunculus thalami inferior
- 51 *Thalamencephalon*
- 52 *Thalamus*
- 53 Pulvinar
- 54 Tuberculum anterius thalami
- 55 Taenia thalami
- 56 Stria medullaris
- 57 Lamina chorioidea epithelialis
- 58 *Metathalamus*
- 59 Corpus geniculatum mediale
- 60 Corpus geniculatum laterale
- 61 *Epithalamus*
- 62 Corpus pineale
- 63 Recessus pinealis
- 64 Recessus suprapinealis
- 65 Habenula
- 66 Commissura habenularum
- 67 Trigonum habenulae
- 68 *Sectiones thalamencephali*
- 69 Stratum zonale
- 70 Nucleus anterior thalami
- 71 Nucleus medialis thalami
- 72 Nucleus lateralis thalami
- 73 Laminae medullares thalami

- 1 Nucleus corporis geniculati
 medialis
- 2 Nucleus corporis geniculati
 lateralis
- 3 Nucleus habenulae
- 4 Fasciculus retroflexus
 [Meynerti]
- 5 *Telencephalon*
- 6 *Hemisphaerium*
- 7 *Pallium*
- 8 Fissura longitudinalis cerebri
- 9 Fissura transversa cerebri
- 10 Gyri cerebri
 - 11 Gyri profundi
 - 12 Gyri transitive
- 13 Sulci cerebri
- 14 Impressio petrosa
- 15 Fossa cerebri lateralis
 [Sylvii]
- 16 Fissura cerebri lateralis
 [Sylvii]
 - 17 Ramus posterior
 - 18 Ramus anterior ascendens
 - 19 Ramus anterior horizontalis
- 20 *Lobi cerebri*
- 21 *Insula*
- 22 Gyri insulae
- 23 Gyrus longus insulae
- 24 Gyri breves insulae
- 25 Sulcus circularis [Reili]
- 26 Operculum
 - 27 Pars frontalis
 - 28 Pars parietalis
 - 29 Pars temporalis
- 30 Sulcus centralis [Rolandi]
- 31 Gyrus centralis anterior
- 32 Gyrus centralis posterior
- 33 *Lobus frontalis*
- 34 Polus frontalis
- 35 Sulcus praecentralis
- 36 Gyrus frontalis superior
- 37 Sulcus frontalis superior
- 38 Gyrus frontalis medius
- 39 Pars superior
- 40 Pars inferior
- 41 Sulcus frontalis inferior
- 42 Gyrus frontalis inferior
 - 43 Pars opercularis
 - 44 Pars triangularis
 - 45 Pars orbitalis
- 46 Gyrus rectus
- 47 Sulcus olfactorius
- 48 Gyri orbitales
- 49 Sulci orbitales
- 50 *Lobus temporalis*
- 51 Polus temporalis
- 52 Sulci temporales transversi
- 53 Gyri temporales transversi
- 54 Gyrus temporalis superior
- 55 Sulcus temporalis superior
- 56 Gyrus temporalis medius
- 57 Sulcus temporalis medius
- 58 Gyrus temporalis inferior
- 59 Sulcus temporalis inferior
- 60 Fissura collateralis
- 61 Gyrus fusiformis
- 62 Gyrus lingualis
- 63 *Lobus occipitalis*
- 64 Polus occipitalis
- 65 Sulcus occipitalis transversus
- 66 Gyri occipitalis superiores
- 67 Sulci occipitalis superiores
- 68 Gyri occipitalis laterales
- 69 Sulci occipitalis laterales
- 70 *Lobus parietalis*
- 71 Lobulus parietalis superior
- 72 Sulcus interparietalis
- 73 Lobulus parietalis inferior
- 74 Gyrus supramarginalis
- 75 Gyrus angularis
- 76 *Facies medialis hemisphaerii*
- 77 Sulcus corporis callosi
- 78 Sulcus cinguli
 - 79 Pars subfrontalis

- 1 Pars marginalis
- 2 Sulcus subparietalis
- 3 Fissura hippocampi
- 4 Gyrus fornicatus
 - 5 Gyrus cinguli
 - 6 Isthmus gyri fornicati
 - 7 Gyrus hippocampi
 - 8 Uncus [gyri hippocampi]
- 9 Substantia reticularis alba [Arnoldi]
- 10 Lobulus paracentralis
- 11 Praecuneus
- 12 Fissura parietooccipitalis
- 13 Fissura calcarina
- 14 Cuneus
- 15 Corpus callosum
 - 16 Splenium corporis callosi
 - 17 Truncus corporis callosi
 - 18 Genu corporis callosi
 - 19 Rostrum corporis callosi
 - 20 Lamina rostralis
 - 21 Striae transversae
 - 22 Stria longitudinalis medialis
 - 23 Stria longitudinalis lateralis
 - 24 Fasciola cinerea
 - 25 Fornix
 - 26 Crus fornicis
 - 27 Corpus fornicis
 - 28 Taenia fornicis
 - 29 Columna fornicis
 - 30 Pars libera columnae fornicis
 - 31 Pars tecta columnae fornicis
 - 32 Septum pellucidum
 - 33 Laminae septi pellucidi
 - 34 Cavum septi pellucidi
 - 35 Ventriculus lateralis
 - 36 Pars centralis
 - 37 Cornu anterius
 - 38 Cornu posterius
 - 39 Cornu inferius
 - 40 Corpus striatum
 - 41 Nucleus caudatus
 - 42 Caput nucleï caudati
 - 43 Cauda nucleï caudati
 - 44 Stria terminalis
 - 45 Lamina affixa
 - 46 Taenia chorioidea
 - 47 Lamina chorioidea epithelialis
 - 48 Calcar avis
 - 49 (Bulbus cornu posterioris)
 - 50 Eminentia collateralis
 - 51 Trigonum collaterale
 - 52 Hippocampus
 - 53 Fimbria hippocampi
 - 54 Taenia fimbriae
 - 55 Digitationes hippocampi
 - 56 Fascia dentata hippocampi
 - 57 Commissura hippocampi
 - 58 Rhinencephalon
 - 59 Sulcus parolfactorius anterior
 - 60 Pars anterior [rhinencephali]
 - 61 Lobus olfactorius
 - 62 Bulbus olfactorius
 - 63 Tractus olfactorius
 - 64 Trigonum olfactorium
 - 65 Stria medialis
 - 66 Stria intermedia
 - 67 Area parolfactoria [Brocae]
 - 68 Sulcus parolfactorius posterior
 - 69 Pars posterior [rhinencephali]
 - 70 Gyrus subcallosus [Pedunculus corporis callosi]
 - 71 Substantia perforata anterior
 - 72 Stria olfactoria lateralis
 - 73 Limen insulae
 - 74 Sectiones telencephali
 - 75 Substantia corticalis
 - 76 Centrum semiovale
 - 77 Decursus fibrarum cerebralium

- 1 Fibrae arcuatae cerebri
- 2 Cingulum
- 3 Fasciculus longitudinalis superior
- 4 Fasciculus longitudinalis inferior
- 5 Fasciculus uncinatus
- 6 Radiatio corporis callosi
 - 7 Pars frontalis
 - 8 Pars parietalis
 - 9 Pars temporalis
 - 10 Pars occipitalis
 - 11 Tapetum
- 12 Nucleus lentiformis
- 13 Putamen
- 14 Globus pallidus
- 15 Claustrum
- 16 Capsula externa
- 17 Capsula interna
 - 18 Genu capsulae internae
 - 19 Pars frontalis capsulae internae
 - 20 Pars occipitalis capsulae internae
- 21 Nucleus amygdalae
- 22 Corona radiata
 - 23 Pars frontalis
 - 24 Pars parietalis
 - 25 Pars temporalis
 - 26 Pars occipitalis
- 27 Radiatio corporis striati
- 28 Radiatio occipitothalamica [Gratioleti]
- 29 Commissura anterior [cerebri]
 - 30 Pars anterior
 - 31 Pars posterior
- 32 MENINGES
- 33 Dura mater encephali
- 34 Falx cerebri
- 35 Tentorium cerebelli
- 36 Falx cerebelli
- 37 Diaphragma sellae
- 38 Foramen diaphragmatis [sellae]
- 39 Incisura tentorii
- 40 Dura mater spinalis
- 41 Filum durae matris spinalis
- 42 Cavum epidurale
- 43 Cavum subdurale
- 44 Arachnoidea spinalis
- 45 Arachnoidea encephali
- 46 Cavum subarachnoideale
- 47 Cisternae subarachnoidales
 - 48 Cisterna cerebellomedullaris
 - 49 Cisterna fossae lateralis cerebri [Sylvii]
 - 50 Cisterna chiasmatis
 - 51 Cisterna interpeduncularis
 - 52 Cisterna venae magnae cerebri
- 53 Granulationes arachnoideales [Pacchioni]
- 54 Pia mater spinalis
- 55 Lig. denticulatum
- 56 Septum cervicale intermedium
- 57 Pia mater encephali
- 58 Tela chorioidea ventriculi quarti
- 59 Plexus chorioideus ventriculi quarti
- 60 Tela chorioidea ventriculi tertii
- 61 Plexus chorioideus ventriculi tertii
- 62 Plexus chorioideus ventriculi lateralis
- 63 Glomus chorioideum
- 64 Acervulus

1 *Systema nervorum periphericum*

2 NERVI CEREBRALES

3 NN. OLFACTORII

4 N. OPTICUS

5 N. OCULOMOTORIUS

6 Ramus superior

7 Ramus inferior

8 Radix brevis ganglii
ciliaris

9 N. TROCHLEARIS

10 Decussatio nervorum troch-
learium

11 N. TRIGEMINUS

12 Portio major

13 Ganglion semilunare [Gasseri]

14 Portio minor

15 *N. ophthalmicus*

16 N. tentorii

17 N. lacrimalis

18 Ramus anastomoticus cum n.
zygomatiko

19 N. frontalis

20 N. supraorbitalis

21 Ramus frontalis

22 N. supratrochlearis

23 N. nasociliaris

24 Radix longa ganglii
ciliaris

25 Nn. ciliares longi

26 N. ethmoidalis posterior

27 N. ethmoidalis anterior

28 Rami nasales anteriores

29 Rami nasales interni

30 Rami nasales
laterales

31 Rami nasales mediales

32 Ramus nasalis externus

33 N. infratrochlearis

34 Ramus palpebralis superior

35 R. palpebralis inferior

36 G. ciliare

37 Nn. ciliares breves

38 *N. maxillaris*

39 N. meningeus [medius]

40 N. zygomaticus

41 Ramus zygomaticotemporalis

42 Ramus zygomaticofacialis

43 Nn. sphenopalatini

44 Nn. alveolares superiores

45 Rami alveolares superiores
posteriores

46 N. infraorbitalis

47 R. alveolaris superior
medius48 Rami alveolares superiores
anteriores

49 Plexus dentalis superior

50 Rami dentales superiores

51 Rami gingivales supe-
riores

52 Rami palpebrales inferiores

53 Rami nasales externi

54 Rami nasales interni

55 Rami labiales superiores

56 G a n g l i o n s p h e n o -
p a l a t i n u m

57 Rami orbitales

58 N. canalis pterygoidei [Vidii]

59 N. petrosus superficialis
major

60 N. petrosus profundus

61 Rami nasales posteriores
superiores laterales62 Rami nasales posteriores
superiores mediales

63 N. nasopalatinus [Scarpae]

- 1 Rami nasales posteriores inferiores [laterales]
- 2 Nn. palatini
 - 3 N. palatinus anterior
 - 4 N. palatinus medius
 - 5 N. palatinus posterior
- 6 *N. mandibularis*
- 7 N. spinosus
- 8 N. masticatorius
 - 9 N. massetericus
- 10 Nn. temporales profundi
 - 11 N. temporalis profundus posterior
 - 12 N. temporalis profundus anterior
- 13 N. buccinatorius
- 14 N. pterygoideus externus
- 15 N. pterygoideus internus
- 16 N. auriculotemporalis
- 17 N. meatus auditorii externi
- 18 R. membranae tympani
- 19 Rami parotidei
- 20 Rami anastomotici cum n. faciali
- 21 Nn. auriculares anteriores
- 22 Rami temporales superficiales
- 23 N. lingualis
- 24 Rami isthmi faucium
- 25 Rami anastomotici cum n. hypoglosso
- 26 N. sublingualis
- 27 Rami linguales
- 28 N. alveolaris inferior
 - 29 Plexus dentalis inferior
 - 30 Rami dentales inferiores
 - 31 Rami gingivales inferiores
- 32 N. mylohyoideus
- 33 N. mentalis
 - 34 Rami mentales
 - 35 Rami labiales inferiores
- 36 *Ganglion oticum*
- 37 N. petrosus superficialis minor
- 38 N. tensoris veli palatini
- 39 N. tensoris tympani
- 40 Ramus anastomoticus cum n. spinoso
- 41 R. anastomoticus cum n. auriculotemporalis
- 42 Ramus anastomoticus cum chorda tympani
- 43 *Ganglion submaxillare*
- 44 Rami communicantes cum n. linguali
- 45 Rami submaxillares
- 46 N. ABDUCENS
- 47 N. FACIALIS
- 48 Geniculum n. facialis
- 49 Ganglion geniculi
- 50 N. stapedius
- 51 Ramus anastomoticus cum plexu tympanico
- 52 N. auricularis posterior
- 53 Ramus occipitalis
- 54 Ramus digastricus
- 55 Ramus stylohyoideus
- 56 Ramus anastomoticus cum n. glossopharyngeo
- 57 Plexus parotideus
- 58 Rami temporales
- 59 Rami zygomatici
- 60 Rami buccales
- 61 Ramus marginalis mandibulae
- 62 Ramus colli
- 63 N. intermedius
- 64 Chorda tympani
- 65 N. ACUSTICUS
- 66 Radix vestibularis
- 67 Radix cochlearis
- 68 Fila anastomotica
- 69 N. vestibuli
- 70 Ganglion vestibulare

- 1 N. utricularis
- 2 N. ampullaris superior
- 3 N. ampullaris lateralis
- 4 N. ampullaris inferior
- 5 N. cochleae
- 6 Ganglion spirale
- 7 N. saccularis
- 8 N. GLOSSOPHARYNGEUS
- 9 Ganglion superius
- 10 Ganglion petrosum
- 11 N. tympanicus
- 12 Intumescencia tympanica
- 13 Plexus tympanicus [Jacobsoni]
- 14 N. caroticotympanicus superior
- 15 N. caroticotympanicus inferior
- 16 Ramus tubae
- 17 R. anastomoticus cum ramo auriculari n. vagi
- 18 Rami pharyngei
- 19 Ramus stylopharyngus
- 20 Rami tonsillares
- 21 Rami linguales
- 22 N. VAGUS
- 23 Ganglion jugulare
- 24 Ganglion nodosum
- 25 Ramus meningeus
- 26 Ramus auricularis
- 27 R. anastomoticus cum n. glossopharyngeo
- 28 Rami pharyngei
- 29 Plexus pharyngeus
- 30 N. laryngeus superior
- 31 Ramus externus
- 32 Ramus internus
- 33 Ramus anastomoticus cum n. laryngeo inferiore
- 34 Rami cardiaci superiores
- 35 (N. depressor)
- 36 N. recurrens
- 37 Rami cardiaci inferiores
- 38 Rami tracheales
- 39 Rami oesophagei
- 40 N. laryngeus inferior
- 41 Ramus anterior
- 42 Ramus posterior
- 43 Rami bronchiales anteriores
- 44 Rami bronchiales posteriores
- 45 Plexus pulmonalis anterior
- 46 Plexus pulmonalis posterior
- 47 Rami oesophagei
- 48 Plexus oesophageus anterior
- 49 Plexus oesophageus posterior
- 50 Rami gastrici
- 51 Plexus gastricus anterior
- 52 Plexus gastricus posterior
- 53 Rami hepatici
- 54 Rami coeliaci
- 55 Rami lienales
- 56 Rami renales
- 57 N. ACCESSORIUS
- 58 Ramus internus
- 59 Ramus externus
- 60 N. HYPOGLOSSUS
- 61 Ramus descendens
- 62 Ansa hypoglossi
- 63 Ramus thyreochoideus
- 64 Rami linguales
- 65 NN. SPINALES
- 66 Fila radicularia
- 67 Radix anterior
- 68 Radix posterior
- 69 Ganglion spinale
- 70 Ramus anterior
- 71 Ramus posterior
- 72 Ramus communicans
- 73 Ramus meningeus
- 74 Cauda equina
- 75 Ansa

- 1 *Nn. cervicales*
- 2 Rami posteriores
 - 3 Ramus medialis
 - 4 Ramus lateralis
- 5 *N. suboccipitalis*
- 6 *N. occipitalis major*
- 7 (*N. occipitalis tertius*)
- 8 Rami anteriores
- 9 *Plexus cervicalis*
- 10 *N. occipitalis minor*
- 11 *N. auricularis magnus*
 - 12 Ramus posterior
 - 13 Ramus anterior
- 14 *N. cutaneus colli*
 - 15 Rami superiores
 - 16 Rami inferiores
- 17 *Nn. supraclaviculares*
 - 18 *Nn. supraclaviculares anteriores*
 - 19 *Nn. supraclaviculares medii*
 - 20 *Nn. supraclaviculares posteriores*
- 21 *N. phrenicus* [riores]
- 22 *Ramus pericardiacus*
- 23 *Rami phrenicoabdominales*
- 24 *PLEXUS BRACHIALIS*
- 25 *Pars supraclavicularis*
 - 26 *Nn. thoracales posteriores*
 - 27 *N. dorsalis scapulae*
 - 28 *N. thoracalis longus*
 - 29 *Nn. thoracales anteriores*
 - 30 *Nn. subclavius*
 - 31 *N. suprascapularis*
 - 32 *Nn. subscapulares*
 - 33 *N. thoracodorsalis*
 - 34 *N. axillaris*
 - 35 Rami musculares
 - 36 *N. cutaneus brachii lateralis*
- 37 *Pars infraclavicularis*
 - 38 *Fasciculus lateralis*
 - 39 *Fasciculus medialis*
 - 40 *Fasciculus posterior*
- 41 *N. musculocutaneus*
- 42 Rami musculares lateralis
- 43 *N. cutaneus antibrachii lateralis*
- 44 *N. cutaneus brachii medialis*
- 45 *N. cutaneus antibrachii medialis*
 - 46 *Ramus volaris*
 - 47 *Ramus ulnaris*
- 48 *N. medianus*
- 49 Rami musculares
- 50 *N. interosseus [antibrachii] volaris*
 - 51 *Ramus palmaris n. mediani*
 - 52 *Ramus anastomoticus cum n. ulnari*
- 53 *Nn. digitales volares communes*
- 54 *Nn. digitales volares proprii*
- 55 *N. ulnaris*
 - 56 *Ramus cutaneus palmaris*
 - 57 *Ramus dorsalis manus*
 - 58 *Nn. digitales dorsales*
- 59 *Ramus volaris manus*
 - 60 *Ramus superficialis*
 - 61 *Nn. digitales volares communes*
 - 62 *Nn. digitales volares proprii*
- 63 *Ramus profundus*
- 64 Rami musculares
- 65 *N. radialis*
 - 66 *N. cutaneus brachii posterior*
 - 67 Rami musculares
 - 68 *N. cutaneus antibrachii dorsalis*
 - 69 *Ramus profundus*
 - 70 *N. interosseus [antibrachii] dorsalis*
 - 71 *Ramus superficialis*
 - 72 *Ramus anastomoticus ulnaris*
 - 73 *Nn. digitales dorsales*
- 74 *Nn. thoracales*
- 75 Rami posteriores
 - 76 *Ramus cutaneus lateralis*
 - 77 *Ramus cutaneus medialis*

- 1 Rami anteriores [Nn. intercostales]
- 2 Rami musculares
- 3 Ramus cutaneus lateralis [pectoralis et abdominalis]
 - 4 Ramus posterior
 - 5 Ramus anterior
 - 6 Rami mammarii laterales
- 7 Nn. intercostobrachiales
- 8 Ramus cutaneus anterior [pectoralis et abdominalis]
 - 9 Rami mammarii mediales
- 10 *Nn. lumbales, sacrales, coccygeus*
- 11 Nn. lumbales
- 12 Rami posteriores
 - 13 Ramus medialis
 - 14 Ramus lateralis
 - 15 Nn. clunium superiores
- 16 Rami anteriores
- 17 Nn. sacrales et coccygeus
 - 18 Rami posteriores
 - 19 Ramus medialis
 - 20 Ramus lateralis
 - 21 Nn. clunium medii
- 22 PLEXUS LUMBO-SACRALIS
- 23 PLEXUS LUMBALIS
- 24 Rami musculares
 - 25 *N. iliohypogastricus*
 - 26 Rami musculares
 - 27 Ramus cutaneus lateralis
 - 28 Ramus cutaneus anterior
 - 29 *N. ilioinguinalis*
 - 30 Rami musculares
 - 31 Nn. scrotales anteriores
 - 32 Nn. labiales anteriores
 - 33 *N. genitofemoralis*
 - 34 *N. lumboinguinalis*
 - 35 *N. spermaticus externus*
 - 36 *N. cutaneus femoris lateralis*
 - 37 *N. orturatorius*
 - 38 Ramus anterior
 - 39 Ramus cutaneus
 - 40 Ramus posterior
 - 41 *N. femoralis*
 - 42 Rami cutanei anteriores
 - 43 Rami musculares
 - 44 *N. saphenus*
 - 45 Ramus infrapatellaris
 - 46 Rami cutanei cruris mediales
 - 47 PLEXUS SACRALIS
 - 48 Truncus lumbosacralis
 - 49 *N. gluteus superior*
 - 50 *N. gluteus inferior*
 - 51 *N. cutaneus femoris posterior*
 - 52 Nn. clunium inferiores
 - 53 Rami perineales
 - 54 *N. ischiadicus*
 - 55 Rami musculares
 - 56 *N. peroneus communis*
 - 57 Rami musculares
 - 58 *N. cutaneus surae lateralis*
 - 59 Ramus anastomoticus peroneus
 - 60 *N. peroneus superficialis*
 - 61 Rami musculares
 - 62 *N. cutaneus dorsalis medialis*
 - 63 *N. cutaneus dorsalis intermedius*
 - 64 Nn. digitales dorsales pedis
 - 65 *N. peroneus profundus*
 - 66 Rami musculares
 - 67 Nn. digitales dorsales hallucis lateralis et digiti secundi medialis
 - 68 *N. tibialis*
 - 69 Rami musculares

- 1 N. interosseus cruris
- 2 N. cutaneus surae medialis
- 3 N. suralis
 - 4 Rami calcanei laterales
- 5 N. cutaneus dorsalis
 - lateralis
- 6 Rami calcanei mediales
- 7 N. plantaris medialis
 - 8 Nn. digitales plantares communes
 - 9 Nn. digitales plantares proprii
- 10 N. plantaris lateralis
 - 11 Ramus superficialis
 - 12 Nn. digitales plantares communes
 - 13 Nn. digitales plantares proprii
- 14 Ramus profundus
- 29 *Systema nervorum sympathicum*
- 30 Truncus sympathicus
- 31 Ganglia trunci sympathici
- 32 Plexus sympathici
- 33 Ganglia plexuum sympathicorum
- 34 PARS CEPHALICA ET CERVICALIS S. SYMPATHICI
- 35 Ganglion cervicale superius
- 36 N. jugularis
- 37 N. caroticus internus
- 38 Plexus caroticus internus
- 39 Plexus cavernosus
- 40 Plexus arteriae cerebri anterioris
- 41 Plexus arteriae cerebri mediae
- 42 Plexus arteriae chorioideae
- 43 Plexus ophthalmicus
- 44 Radices sympathicae ganglii ciliaris
- 45 Nn. carotici externi
- 46 Plexus caroticus externus
- 47 Plexus thyroideus superior
- 15 PLEXUS PUDENDUS
- 16 N. haemorrhoidales medii
- 17 Nn. vesicales inferiores
- 18 Nn. vaginales
- 19 N. pudendus
 - 20 Nn. haemorrhoidales inferiores
- 21 N. perinei
- 22 Nn. scrotales posteriores
- 23 Nn. labiales posteriores
- 24 N. dorsalis penis
- 25 N. dorsalis clitoridis
- 26 N. COCCYGEUS
- 27 Plexus coccygeus
- 28 Nn. anococcygei
- 48 Plexus lingualis
- 49 Plexus maxillaris externus
- 50 Radix sympathica ganglii submaxillaris
- 51 Plexus occipitalis
- 52 Plexus auricularis posterior
- 53 Plexus temporalis superficialis
- 54 Plexus maxillaris internus
- 55 Plexus meningeus
- 56 Plexus caroticus communis
- 57 Rami laryngopharyngei
- 58 Plexus pharyngeus ascendens
- 59 N. cardiacus superior
- 60 Ganglion cervicale medium
- 61 N. cardiacus medius
- 62 Ganglion cervicale inferius
- 63 Ansa subclavia [Vieussenii]
- 64 N. cardiacus inferior
- 65 Plexus subclavius
- 66 Plexus mammarius internus
- 67 Plexus thyroideus inferior
- 68 Plexus vertebralis

- | | |
|--------------------------------------|-----------------------------------|
| 1 PARS THORACALIS S. | 27 Plexus gastricus inferior |
| SYMPATHICI | 28 Plexus suprarenalis |
| 2 Ganglia thoracalia | 29 Plexus renalis |
| 3 N. splanchnicus major | 30 Plexus spermaticus |
| 4 Ganglion splanchnicum | 31 Plexus arteriae ovaricae |
| 5 N. splanchnicus minor | 32 Plexus mesentericus superior |
| 6 Ramus renalis | 33 Plexus myentericus |
| 7 (N. splanchnicus imus) | 34 Plexus submucosus |
| 8 Plexus aorticus thoracalis | 35 Plexus mesentericus inferior |
| 9 Plexus cardiacus | 36 Nn. haemorrhoidales superiores |
| 10 Plexus coronarius cordis anterior | 37 Plexus iliacus |
| 11 Ganglion cardiacum [Wrisbergi] | 38 Plexus iliacus |
| 12 Plexus coronarius posterior | 39 Plexus hypogastricus |
| 13 Rami pulmonales | 40 Plexus haemorrhoidalis medius |
| 14 Plexus pulmonalis | 41 Plexus prostaticus |
| | 42 Plexus deferentialis |
| 15 PARS ABDOMINALIS ET PELVINA | 43 Plexus uterovaginalis |
| S. SYMPATHICI | 44 Plexus vesicalis |
| 16 Ganglia lumbalia | 45 Nn. vesicales superiores |
| 17 Ganglia sacralia | 46 Nn. vesicales inferiores |
| 18 Plexus aorticus abdominalis | 47 Plexus cavernosus penis |
| 19 Plexus coeliacus | 48 N. cavernosus penis major |
| 20 Ganglia coeliaca | 49 Nn. cavernosi penis minores |
| 21 Ganglion mesentericum superius | 50 Plexus cavernosus clitoridis |
| 22 Plexus phrenicus | 51 N. cavernosus clitoridis |
| 23 Ganglia phrenica | major |
| 24 Plexus phrenicus | 52 Nn. cavernosi clitoridis |
| 25 Plexus lienalis | minores |
| 26 Plexus gastricus superior | 53 Plexus femoralis |
| | 54 Plexus popliteus |

1 ORGANA SENSUUM ET INTEGUMENTUM COMMUNE

2 ORGANON VISUS

3 OCULUS

4 OPTICUS

5 Vaginae n. optici

6 Spatia intervaginalia

7 BULBUS OCULI

8 Polus anterior

9 Polus posterior

10 Aequator

11 Meridiani

12 Axis oculi externa

13 Axis oculi interna

14 Axis optica

15 [Linea visus]

16 Vesicula ophthalmica*

17 Caliculus ophthalmicus*

18 TUNICA FIBROSA OCULI

19 *Sclera*

20 Sulcus sclerae

21 Rima cornealis

22 Sinus venosus sclerae [Canalis
Schlemmi, Lauthi]

23 Lamina fusca

24 Lamina cribrosa sclerae

25 (Raphe sclerae)

26 (Funiculus sclerae)

27 *Cornea*

28 Annulus conjunctivae

29 Vertex corneae

30 Limbus corneae

31 Facies anterior

32 Facies posterior

33 Epithelium corneae

34 Lamina elastica anterior
[Bowmani]

35 Substantia propria

36 Lamina elastica posterior

[Demoursi, Descemeti]

37 Endothelium camerae anterioris

38 TUNICA VASCULOSA OCULI

39 *Chorioidea*

40 Lamina suprachorioidea

41 Spatium perichorioideale

42 Lamina vasculosa

43 Lamina choriocapillaris

44 Lamina basalis

45 (Raphe chorioideae)

46 *Corpus ciliare*

47 Corona ciliaris

48 Processus ciliares

49 Plicae ciliares

50 Orbiculus ciliaris

51 M. ciliaris

52 Fibrae meridionales
[Brucke]53 Fibrae circulares
[Muelleri]

54 Plexus gangliosis ciliaris

55 *Iris*

56 Margopupillaris

57 Margo ciliaris

58 Facies anterior

- 1 Facies posterior
- 2 Annulus iridis major
- 3 Annulus iridis minor
- 4 Plicae iridis
- 5 Pupilla
- 6 M. sphincter pupillae
- 7 Stroma iridis
- 8 M. dilatator pupillae
- 9 Lig. pectinatum iridis
- 10 Spatia anguli iridis [Fontanae]
- 11 Circulus arteriosus major
- 12 Circulus arteriosus minor
- 13 Membrana pupillaris*
- 14 STRATUM PIGMENTI
- 15 Stratum pigmenti retinae
- 16 Stratum pigmenti corporis ciliaris
- 17 Stratum pigmenti iridis
- 18 RETINA
- 19 Pars optica retinae
- 20 Ora serrata
- 21 Pars ciliaris retinae
- 22 Papilla n. optici
- 23 Excavatio papillae n. optici
- 24 Macula lutea
- 25 Fovea centralis
- 26 Vasa sanguinea retinae
- 27 Circulus vasculosus n. optici [Halleri]
- 28 Arteriola [Venula] temporalis retinae superior
- 29 Arteriola [Venula] temporalis retinae inferior
- 30 Arteriola [Venula] nasalis retinae superior
- 31 Arteriola [Venula] nasalis retinae inferior
- 32 Arteriola [Venula] macularis superior
- 33 Arteriola [Venula] macularis inferior
- 34 Arteriola [Venula] retinae medialis
- 35 CAMERA OCULI ANTERIOR
- 36 Angulus iridis
- 37 CAMERA OCULI POSTERIOR
- 38 CORPUS VITREUM
- 39 A. hyaloidea*
- 40 Canalis hyaloidea
- 41 Fossa hyaloidea
- 42 Membrana hyaloidea
- 43 Stroma vitreum
- 44 Humor vitreus
- 45 LENS CRYSTALLINA
- 46 Substantia lentis
- 47 Substantia corticalis
- 48 Nucleus lentis
- 49 Fibrae lentis
- 50 Epithelium lentis
- 51 Capsula lentis
- 52 Polus anterior lentis
- 53 Polus posterior lentis
- 54 Facies anterior lentis
- 55 Facies posterior lentis
- 56 Axis lentis
- 57 Aequator lentis
- 58 Radii lentis
- 59 ZONULA CILIARIS [ZINNI]
- 60 Fibrae zonulares
- 61 Spatia zonularia
- 62 ORGANA OCULI ACCESSORIA
- 63 *Musculi oculi, fasciae orbitales*
- 64 M. orbitalis
- 65 M. rectus superior
- 66 M. rectus inferior
- 67 M. rectus medialis
- 68 M. rectus lateralis
- 69 Lacertus musculi recti lateralis
- 70 Annulus tendineus communis [Zinni]
- 71 M. obliquus superior

- 1 Trochlea
- 2 M. obliquus inferior
- 3 M. levator palpebrae superioris
- 4 Periorbita
- 5 Septum orbitale
- 6 Fasciae musculares
- 7 Fascia bulbi [Tenoni]
- 8 Spatium interfasciale [Tenoni]
- 9 Corpus adiposum orbitae

10 *Supercilium*

11 *Palpebrae*

- 12 Palpebra superior
- 13 Palpebra inferior
- 14 Facies anterior palpebrarum
- 15 Facies posterior palpebrarum
- 16 Rima palpebrarum
- 17 Commissura palpebrarum
lateralis
- 18 Commissura palpebrarum
medialis
- 19 Angulus oculi lateralis
- 20 Angulus oculi medialis
- 21 Limbi palpebrales anteriores
- 22 Limbi palpebrales posteriores
- 23 Tarsus superior
- 24 Tarsus inferior
- 25 Lig. palpebrale mediale
- 26 Raphe palpebralis lateralis
- 27 Glandulae tarsales [Meibomi]
- 28 Sebum palpebrale
- 29 M. tarsalis superior
- 30 M. tarsalis inferior

31 *CONJUNCTIVA*

- 32 Plica semilunaris conjunctivae
- 33 Caruncula lacrimalis
- 34 Tunica conjunctiva bulbi
- 35 Tunica conjunctiva palpebra-
rum
- 36 Fornix conjunctivae superior
- 37 Fornix conjunctivae palpebra-
rum
- 38 Gl. mucosae [Krausei]
- 39 Noduli lymphatici con-
junctivales
- 40 (Pinguecula)

41 *APPARATUS LACRIMALIS*

- 42 Glandula lacrimalis superior
- 43 Glandula lacrimalis inferior
- 44 (Gl. lacrimales accessoriae)
- 45 Ductuli excretorii [gl.
lacrimalis]
- 46 Rivus lacrimalis
- 47 Lacus lacrimalis
- 48 Puncta lacrimalia
- 49 Ductus lacrimales
- 50 Papillae lacrimales
- 51 Ampulla ductus lacrimalis
- 52 Saccus lacrimalis
- 53 Fornix sacci lacrimalis
- 54 Ductus nasolacrimalis
- 55 Plica lacrimalis [Hasneri]
- 56 Lacrimae

57 *Organon auditus*

58 *Auris interna*

59 *LABYRINTHUS MEMBRANA- CEUS*

- 60 Ductus endolymphaticus
- 61 Saccus endolymphaticus
- 62 Ductus utriculosaccularis
- 63 Utriculus
- 64 Ductus semicirculares
- 65 Ductus semicircularis
superior
- 66 Ductus semicircularis
posterior
- 67 Ductus semicircularis
lateralis
- 68 Ampullae membranaceae
- 69 Sulcus ampullaris
- 70 Crista ampullaris
- 71 Ampulla membranacea
superior
- 72 Ampulla membranacea
posterior
- 73 Ampulla membranacea
lateralis
- 74 Sacculus
- 75 Ductus reuniens [Henseni]
- 76 Maculae acusticae
- 77 Macula acustica utriculi
- 78 Macula acustica sacculi

- 1 Otoconia
- 2 Endolympha
- 3 Perilympha
- 4 Spatium perilymphaticum
- 5 Ductus perilymphatici
- 6 Ductus cochlearis
- 7 Caecum cupulare
- 8 Caecum vestibulare
- 9 Lamina basilaris
- 10 Membrana vestibularis
[Reissneri]
- 11 Lig. spirale cochleae
- 12 Prominentia spiralis
- 13 Stria vascularis
- 14 Sulcus spiralis
- 15 Labium tympanicum
- 16 Foramina nervosa
- 17 Labium vestibulare
- 18 Ganglion spirale cochleae
- 19 Organon spirale [Cortii]
- 20 Vasa auris
internae
- 21 A. auditiva interna
- 22 Rami vestibulares
- 23 Ramus cochleae
- 24 Glomeruli arteriosi
cochleae
- 25 Vv. auditivae internae
- 26 V. spiralis modioli
- 27 Vas prominens
- 28 Vv. vestibulares
- 29 V. aquaeductus vestibuli
- 30 V. canaliculi cochleae
- 31 LABYRINTHUS OSSEUS
- 32 Vestibulum
- 33 Recessus sphaericus
- 34 Recessus ellipticus
- 35 Crista vestibuli
- 36 Pyramis vestibuli
- 37 Recessus cochlearis
- 38 Maculae cribrosae
- 39 Macula cribrosa superior
- 40 Macula cribrosa media
- 41 Macula cribrosa inferior
- 42 Canales semicirculares ossei
- 43 Canalis semicircularis
superior
- 44 Canalis semicircularis
posterior
- 45 Canalis semicircularis
lateralis
- 46 Ampullae osseae
- 47 Ampulla ossea superior
- 48 Ampulla ossea posterior
- 49 Ampulla ossea lateralis
- 50 Crura ampullaria
- 51 Crus commune
- 52 Crus simplex
- 53 Cochlea
- 54 Cupula
- 55 Basis cochleae
- 56 Canalis spiralis cochleae
- 57 Modiolus
- 58 Basis modioli
- 59 Lamina modioli
- 60 Lamina spiralis ossea
- 61 Hamulus laminae spiralis
- 62 Scala vestibuli
- 63 Scala tympani
- 64 Helicotrema
- 65 Lamina spiralis secundaria
- 66 Canalis spiralis modioli
- 67 Canales longitudinales modioli
- 68 Meatus acusticus in-
ternus
- 69 Porus acusticus internus
- 70 Fundus meatus acustici interni
- 71 Crista transversa
- 72 Area n. facialis
- 73 Area cochleae
- 74 Tractus spiralis foramin-
osus
- 75 Area vestibularis superior
- 76 Area vestibularis inferior
- 77 Foramen singulare
- 78 CAVUM TYMPANI
- 79 Paries tegmentalis

- | | |
|--------------------------------|--------------------------------------|
| 1 Recessus epitympanicus | 39 Stratum radiatum |
| 2 Pars cupularis | 40 Stratum circulare |
| 3 <i>Paries jugularis</i> | 41 Stratum mucosum |
| 4 Prominentia styloidea | |
| 5 <i>Paries labyrinthica</i> | 42 OSSICULA AUDITUS |
| 6 Fenestra vestibuli | 43 <i>Stapes</i> |
| 7 Fossula fenestrae vestibuli | 44 Capitulum stapedis |
| 8 Promontorium | 45 Crus anterior |
| 9 Suleus promontorii | 46 Crus posterior |
| 10 Subiculum promontorii | 47 Basis stapedis |
| 11 Sinus tympani | 48 <i>Incus</i> |
| 12 Fenestra cochleae | 49 Corpus incudis |
| 13 Fossula fenestrae cochleae | 50 Crus longum |
| 14 Crista fenestrae cochleae | 51 Processus lenticularis |
| 15 Processus cochleariformis | 52 Crus breve |
| 16 <i>Paries mastoidea</i> | 53 <i>Malleus</i> |
| 17 Antrum tympanicum | 54 Manubrium mallei |
| 18 Prominentia canalis | 55 Capitulum mallei |
| semicircularis lateralis | 56 Collum mallei |
| 19 Prominentia canalis | 57 Processus lateralis |
| facialis | 58 Processus anterior [Folii] |
| 20 Eminentia pyramidalis | |
| 21 Fossa incudis | 59 <i>Articulationes ossiculorum</i> |
| 22 Sinus posterior | <i>auditus</i> |
| 23 Apertura [tympanica] | 60 Articulatio incudomalleolaris |
| canaliculi chordae | 61 Articulatio incudostapedia |
| 24 Cellulae mastoideae | 62 Syndesmosis tympanostapedia |
| 25 Cellulae tympanicae | |
| 26 <i>Paries carotica</i> | 63 <i>Ligg. ossiculorum auditus</i> |
| 27 <i>Paries membranacea</i> | 64 Lig. mallei anterior |
| | 65 Lig. mallei superius |
| 28 <i>Membrana tympani</i> | 66 Lig. mallei laterale |
| 29 Pars flaccida | 67 Lig. incudis superius |
| 30 Pars tensa | 68 Lig. incudis posterior |
| 31 Limbus membranae tympani | 69 Membrana obturatoria |
| 32 Plica malleolaris anterior | [stapedis] |
| 33 Plica malleolaris posterior | 70 Lig. annulare baseos stapedis |
| 34 Prominentia malleolaris | 71 [M. fixator baseos stapedis] |
| 35 Stria malleolaris | |
| 36 Umbo membranae tympani | 72 <i>Musculi ossiculorum</i> |
| 37 Stratum cutaneum | <i>auditus</i> |
| 38 Annulus fibrocartilagineus | 73 M. tensor tympani |
| | 74 M. stapedius |

- 1 *Tunica mucosa tympanica*
- 2 (Gl. tympanicae)
- 3 Plica malleolaris posterior
- 4 Plica malleolaris anterior
- 5 Recessus membranae tympani anterior
- 6 Recessus tympani membranae superior
- 7 Recessus membranae tympani posterior
- 8 Plica incudis
- 9 Plica stapedis
- 10 Membrana tympani secundaria
- 11 TUBA AUDITIVA [EUSTACHI]
- 12 Ostium tympanicum tubae auditivae
- 13 Pars ossea tubae auditivae
- 14 Isthmus tubae auditivae
- 15 Cellulae pneumaticae tubariae
- 16 Pars cartilagineae tubae auditivae
- 17 Cartilago tubae auditivae
- 18 Lamina [cartilaginis] medialis
- 19 Lamina [cartilaginis] lateralis
- 20 Lamina membranacea
- 21 Tunica mucosa
- 22 Gl. mucosae
- 23 Moduli lymphatici tubarii
- 24 Ostium pharyngeum tubae auditivae
- 25 MEATUS ACUSTICUS EXTERNUS
- 26 Porus acusticus externus
- 27 Incisura tympanica [Rivini]
- 28 Meatus acusticus externus cartilagineus
- 29 Cartilago meatus acustici
- 30 Incisurae cartilaginis meatus acustici externi [Santorini]
- 31 Lamina tragi
- 32 AURICULAE
- 33 Lobulus auriculae
- 34 Cartilago auriculae
- 35 Helix
- 36 Crus heliceis
- 37 Spina heliceis
- 38 Cauda heliceis
- 39 Anthelix
- 40 Fossa triangularis [auriculae]
- 41 Crura antheliceis
- 42 Scapha
- 43 Concha auriculae
- 44 Cymba conchae
- 45 Cavum conchae
- 46 Antitragus
- 47 Tragus
- 48 Incisura anterior [auris]
- 49 Incisura intertragica
- 50 (Tuberculum auriculae [Darwini])
- 51 (Apex auriculae [Darwini])
- 52 Sulcus auriculae posterior
- 53 (Tuberculum supratragicum)
- 54 Isthmus cartilaginis auris
- 55 Incisura terminalis auris
- 56 Fissura antitragohelicina
- 57 Sulcus antheliceis transversus
- 58 Sulcus cruris heliceis
- 59 Fossa antheliceis
- 60 Eminentia conchae
- 61 Eminentia scaphae
- 62 Eminentia fossae triangularis
- 63 Ligg. auricularia [Valsalvae]
- 64 Lig. auriculare anterius
- 65 Lig. auriculare superius
- 66 Lig. auriculare posterius
- 67 M. heliceis major
- 68 M. heliceis minor
- 69 M. tragicus
- 70 (M. pyramidalis auriculae [Jungi])
- 71 M. antitragicus
- 72 M. transversus auriculae
- 73 M. obliquus auriculae
- 74 (M. incisurae heliceis [Santorini])

- 1 ORGANON OLFACTUS
- 2 ORGANON GUSTUS
- 3 Calyculi gustatorii
- 4 I n t e g u m e n t u m
c o m m u n e
- 5 CUTIS
- 6 Sulci cutis
- 7 Cristae cutis
- 8 Retinacula cutis
- 9 Toruli tactiles
- 10 Foveola coccygea
- 11 Lig. caudale
- 12 *Epidermis*
- 13 Stratum corneum
- 14 Stratum germinativum [Mal-
pighii]
- 15 *Corium*
- 16 Tunica propria
- 17 Corpus papillare
- 18 Papillae
- 19 *Tela subcutanea*
- 20 Panniculus adiposus
- 21 *Corpuscula nervorum*
terminalia
- 22 Corpuscula bulboidea [Krausii]
- 23 Corpuscula lamellosa [Vateri,
Pacini]
- 24 Corpuscula tactus [Meissneri]
- 25 Corpuscula nervorum genitalia
- 26 Corpuscula nervorum articularia
- 27 PILI
- 28 Lanugo
- 29 Capilli
- 30 Supercilia
- 31 Cilia
- 32 Barba
- 33 Tragi
- 34 Vibrissae
- 35 Hirci
- 36 Pubes
- 37 Folliculis pili
- 38 Fundus folliculi pili
- 39 Collum folliculi pili
- 40 Papilla pili
- 41 Scapus pili
- 42 Radix pili
- 43 Bulbus pili
- 44 Mm. arrectores pilorum
- 45 Flumina pilorum
- 46 Vortices pilorum
- 47 (Vortex coccygeus)
- 48 UNGUES
- 49 Matrix unguis
- 50 Cristae matricis unguis
- 51 Suleus matricis unguis
- 52 Vallum unguis
- 53 Corpus unguis
- 54 Radix unguis
- 55 Lunula
- 56 Margo occultus
- 57 Margo liber
- 58 Margo lateralis
- 59 Stratum corneum unguis
- 60 Stratum germinativum unguis
- 61 GLANDULAE CUTIS
- 62 *Gl. glomiformes*
- 63 Gl. sudoriferae
- 64 Corpus gl. sudoriferae
- 65 Ductus sudoriferus
- 66 Porus sudoriferus
- 67 Sudor
- 68 Gl. ciliares [Molli]
- 69 Gl. circumanales

- | | |
|-----------------------------|---|
| 1 Gl. ceruminosae | 10 Ductus lactiferi |
| 2 Cerumen | 11 Sinus lactiferi |
| 3 <i>Glandulae sebaceae</i> | 12 Lac femininum |
| 4 Sebum cutaneum | 13 Colostrum |
| 5 <i>Mamma</i> | 14 Areola mammae |
| 6 Papilla mammae | 15 Gl. sebaceae |
| 7 Corpus mammae | 16 Gl. areolares [Montgomerii] |
| 8 Lobi mammae | 17 M a m m a v i r i l i s |
| 9 Lobuli mammae | 18 (Mammae accessoriae [muliebres
et viriles]) |

- | | |
|------------------------|-------------------------------|
| 1 Regiones capitis | 21 Regio parotideomasseterica |
| 2 Regio frontalis | 22 Fossa retromandibularis |
| 3 Regio supraorbitalis | 23 Regiones colli |
| 4 Regio parietalis | 24 Regio colli anterior |
| 5 Regio occipitalis | 25 Regio submentalis |
| 6 Regio temporalis | 26 Regio hyoidea |
| 7 Regio auricularis | 27 Regio subhyoidea |
| 8 Regio mastoidea | 28 Regio laryngea |
| 9 Regiones faciei | 29 Regio thyreoida |
| 10 Regio nasalis | 30 Regio suprasternalis |

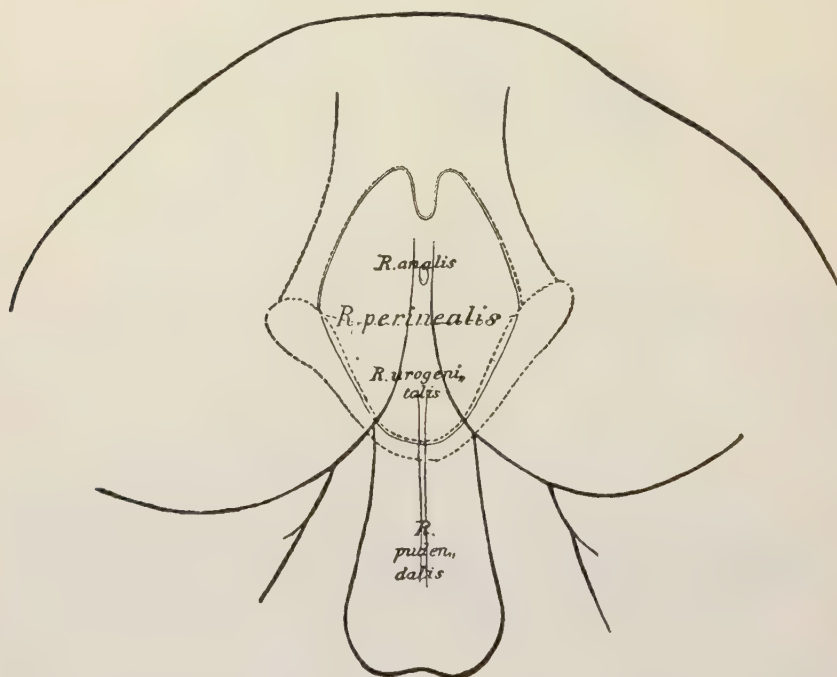


Fig. 2. Perineal regions. Male perineum.

- | | |
|-------------------------------|----------------------------------|
| 11 Regio oralis | 31 Fossa jugularis |
| 12 Regio labialis superior | 32 Regio submaxillaris |
| 13 Regio labialis inferior | 33 Fossa carotica |
| 14 Regio mentalis | 34 Regio sternocleidomastoidea |
| 15 Regio orbitalis | 35 Fossa supraclavicularis minor |
| 16 Regio palpebralis superior | 36 Regio colli lateralis |
| 17 Regio palpebralis inferior | 37 Fossa supraclavicularis major |
| 18 Regio infraorbitalis | 38 Trigonum omoclaviculare |
| 19 Regio buccalis | 39 Regio colli posterior |
| 20 Regio zygomatica | 40 Regio nuchae |

- | | |
|------------------------------------|--------------------------|
| 1 Fovea nuchae | 24 Regio mediana dorsi |
| 2 Regiones pectoris | 25 Regio interseapularis |
| 3 Regio pectoris anterior | 26 Regio scapularis |
| 4 Regio sternalis | 27 Regio suprascapularis |
| 5 Regio clavicularis | 28 Regio infrascapularis |
| 6 Regio infraclavicularis | 29 Regio lumbalis |
| 7 Trigonum deltoideo-
pectorale | 30 Regio coxae |
| 8 Regio mammalis | 31 Regio sacralis |
| 9 Regio inframammalis | 32 Regio glutaee |
| 10 Regio pectoris lateralis | 33 Regio perinealis |
| 11 Regio axillaris | 34 Regio analis |
| 12 Fossa axillaris | 35 Regio urogenitalis |

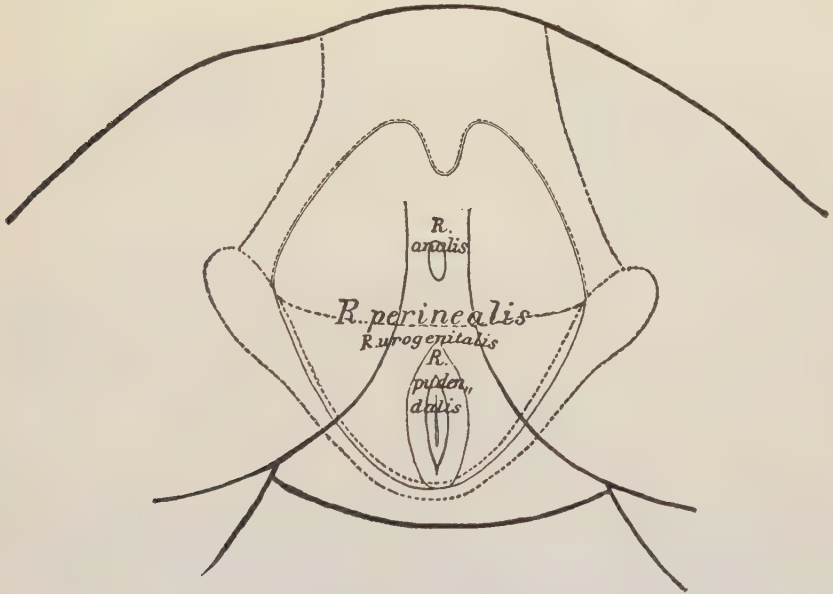


Fig. 3. Perineal regions. Female perineum.

- | | |
|--------------------------------|----------------------------|
| 13 Regio costalis lateralis | 36 Regio pudendalis |
| 14 Regiones abdominis | 37 Regiones extremi- |
| 15 Regio epigastrica | tatis superioris |
| 16 Regio hypochondriaca | 38 Regio acromialis |
| 17 Regio mesogastrica | 39 Regio deltoidea |
| 18 Regio umbilicalis | 40 Regio brachii lateralis |
| 19 Regio abdominalis lateralis | 41 Regio brachii medialis |
| 20 Regio hypogastrica | 42 Regio brachii anterior |
| 21 Regio pubica | 43 Regio brachii posterior |
| 22 Regio inguinalis | 44 Regio cubiti anterior |
| 23 Regiones dorsi | 45 Fossa cubitalis |

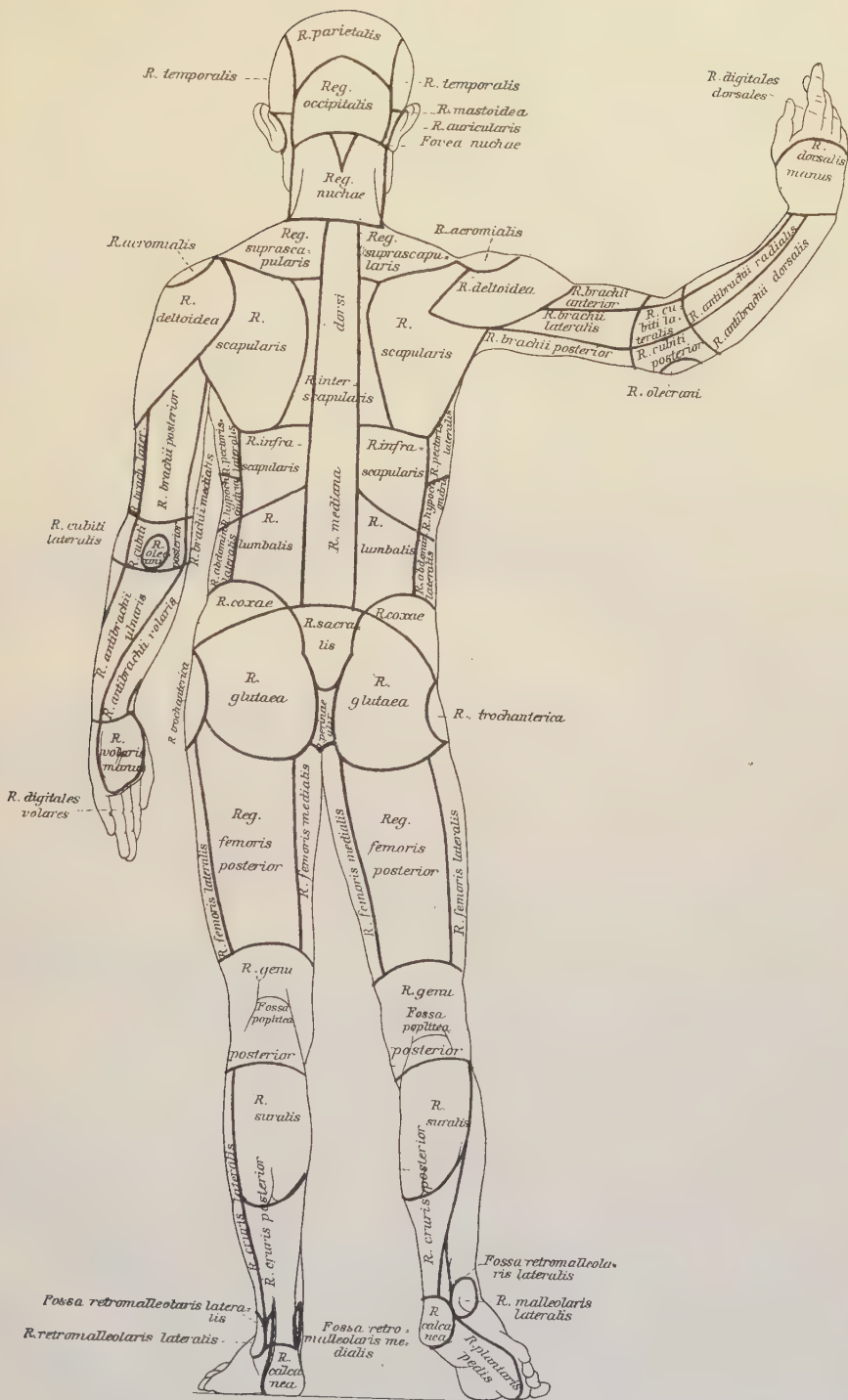
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|---|--|
| 1 Regio cubiti posterior | 23 Regio patellaris |
| 2 Regio olecrani | 24 Regio genu posterior |
| 3 Regio cubiti lateralis | 25 Fossa poplitea |
| 4 Regio cubiti medialis | 26 Regio cruris anterior |
| 5 Regio antibrachii volaris | 27 Regio cruris posterior |
| 6 Regio antibrachii dorsalis | 28 Regio suralis |
| 7 Regio antibrachii radialis | 29 Regio cruris lateralis |
| 8 Regio antibrachii ulnaris | 30 Regio cruris medialis |
| 9 Regio dorsalis manus | 31 Regio malleolaris lateralis |
| 10 Regio volaris manus | 32 Regio malleolaris medialis |
| 11 Regiones digitales [manus] | 33 Regio retromalleolaris
lateralis |
| 12 Regiones dorsales digitorum | 34 Regio retromalleolaris
medialis |
| 13 Regiones unguiculares | 35 Regio calcanea |
| 14 Regiones volares digitorum | 36 Regio dorsalis pedis |
| 15 Regions of the in-
ferior extremity | 37 Regio plantaris pedis |
| 16 Regio femoris anterior | 38 Regiones digitales pedis |
| 17 Fossa subinguinalis | 39 Regiones dorsales digitorum
pedis |
| 18 Regio femoris lateralis | 40 Regiones unguiculares |
| 19 Regio trochanterica | 41 Regiones plantares digitorum
pedis |
| 20 Regio femoris posterior | |
| 21 Regio femoris medialis | |
| 22 Regio genu anterior | |

PLATE 11

Regions of the human body. Anterior aspect.

PLATE 12

Region of the human body. Posterior aspect



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